

GIRLS  SCIENCE

Annual Report 2023





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; hands-on 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.



From the Executive Director

Dear Supporters and Friends,

Girls 4 Science continues to make a difference in the STEM ecosystem in 2023. Our longevity is supported by stakeholders who believe that “it takes a village to raise a child.” To date, G4S has offered \$40,000 in college scholarships sponsored by Cedar Concepts Corporation. Our students benefit from unwavering financial support and return to the community to serve as STEM ambassadors for others.

We are proud of our corporate supporters who have offered our students STEM internships and career panel discussions. These opportunities allow the students to explore opportunities in STEM professions during and after their college experiences. G4S Alum Lauen Lomax is the program’s first participant to graduate with a Doctorate in Occupational Therapy, and we hope to celebrate more milestones with current students.

As a mother, G4S has always been a family experience. Our classes are filled with parents, volunteers, and team members who offer their career highlights on Saturdays. This commitment of service has transferred to our High School Laboratory Assistants who assist with the Saturday STEM Academy. This pipeline of support offers leadership to high school students to complete their volunteer hours and train with our team members with STEM curriculum.

We look forward to the new year and working with each of you in 2024.

With gratitude and optimism,

A handwritten signature in blue ink that reads "Jackie Lomax".

**Founder & Executive Director
Girls 4 Science**



GIRLS 4 SCIENCE 2023 BY THE NUMBERS

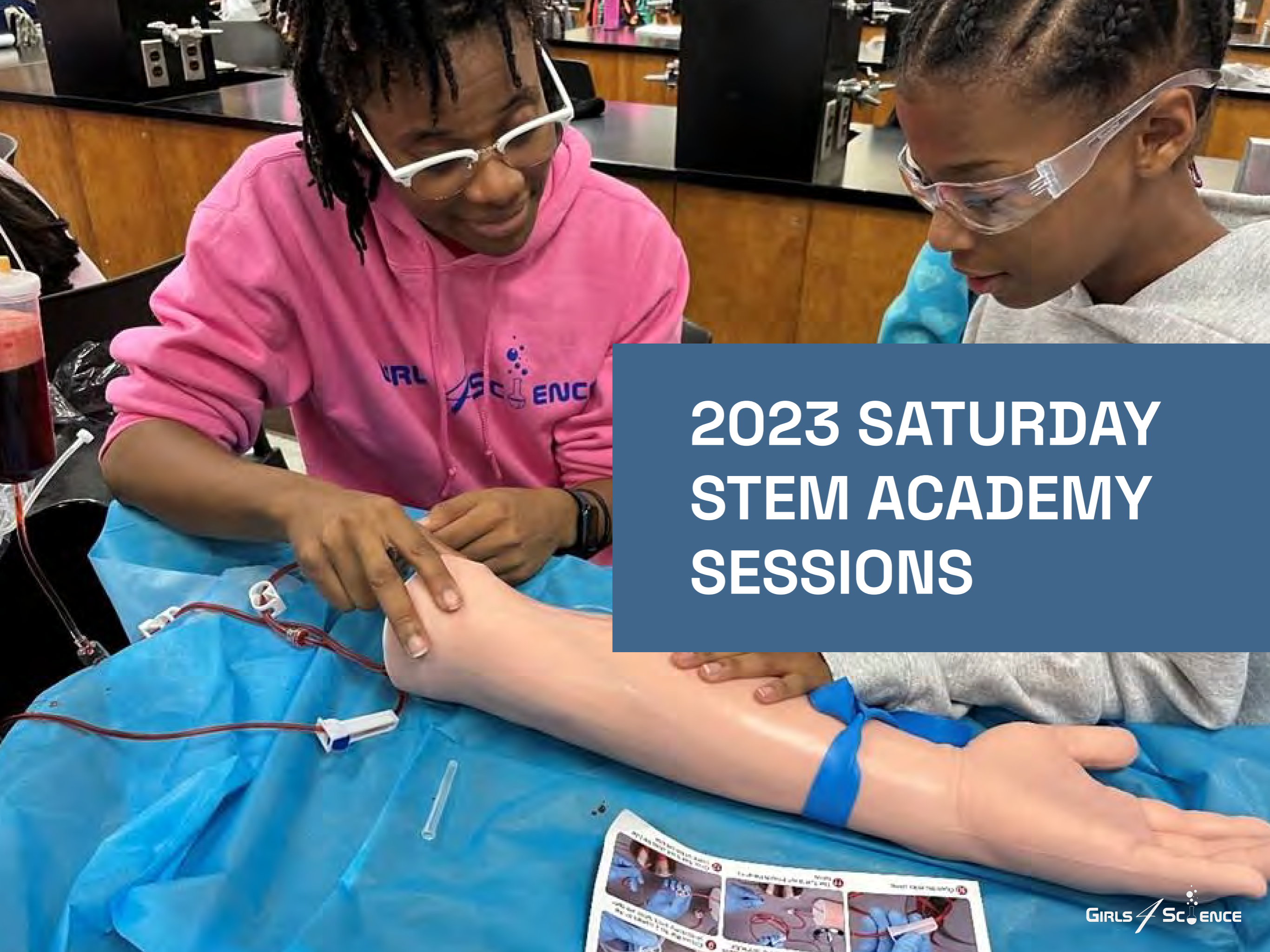
Girls 4 Science fulfills its mission through its Saturday STEM Academy, which provides hands-on experiential learning and mentorship in STEM for girls aged 10-18 years from Chicago and its surrounding communities. The Saturday STEM Academy's innovative program model is based on evidence that science 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.

Saturday STEM Academy 2023 Grantors :

Albert Pick, Jr. Fund
Boeing
Comcast/NBC/Universal
Knowledge Systems Inc.
McGraw Foundation



Participants	484
New Registrants	211
Elementary School (grades 4-5)	131
Middle School (grades 6-8)	243
High School (grades 9-12)	110
Zip Codes represented	94
Chicago Zip Codes represented	52%
Reduced/Free Lunch	56%
American Indian, Alaska Native, Other	1%
Hispanic/Latina	13%
Asian (including Indian subcontinent, Middle East, Phillipines)	7%
Biracial	6%
Black/African American (including Africa and Caribbean)	67%
White (including European Ancestry)	5%
Prefer not to say	1%



2023 SATURDAY STEM ACADEMY SESSIONS

2023 SATURDAY STEM ACADEMY WINTER SESSION

Technology: January 14 – February 18

In the Winter Saturday STEM Academy session on Technology, 96 Girls 4 Science students learned about computer programming and made their own gaming app, under the guidance of the Illinois Math & Science Academy; studied the origins of the universe at the University of Chicago; experienced DJ performing arts and participated in music technology software activities with DJ Dave and the Master Mix Academy; and working with Maker Girl, exercised their entrepreneurial muscles working in teams to ideate, design, create, and pitch a new product or invention using computer-aided design and 3D printing.

“Girls 4 Science is an amazing extracurricular activity that I’m glad I have participated in. Girls 4 Science significantly shaped my views on the world of science, especially since I came into the program as a young pre-teen. I experienced things that weren’t always taught in school, from field trips to hands-on learning activities. Girls 4 Science and its Mentors really influenced my interest in science. I’ve had the opportunity to explore different STEM fields and careers thanks to the amazing teachers and leaders at Girls 4 Science.”

Faith Shelton
Girls 4 Science High School Senior



Holli Perez works on her digital music beat during the Winter Technology Saturday STEM Academy.



(L to R) Zyan Matlock, Layla Akinbusuyi, Ifeni Afinbusuyi, Morayo Akinbusuyi, Zakeyah Dunbar and Mikayla Adkins work together to create digital designs in 3D while solving real world problems.



DJ Dave shows schematic for music technology software.

2023 SATURDAY STEM ACADEMY SPRING SESSION

Physics: April 1 - May 6

One hundred twenty-six students learned the fundamentals of Physics during the Spring Saturday STEM Academy, from Newton's laws of motion through force, kinetic and potential energy, projectile motion, gravity and friction. They applied the laws of physics to several activities, including building a catapult to study projectile motion, building a rollercoaster to study potential and kinetic energy and centrifugal and centripetal force, and designing and building a mini skee-ball game to apply the concepts of energy, forces and motion and the application of the engineering design process. Students also learned the physics of golf on a fieldtrip to Puttshack, and took part in a "Respecting Others and Kindness Workshop" facilitated by Imagination Theater Company.



Building a catapult.



Zoi Patterson and Ily Patterson design a prototype skee-ball game.

2023 SATURDAY STEM ACADEMY SUMMER SESSION

Science of Construction: July 1 – August 5

Girls 4 Science partnered with W.E. O'Neil Construction for the Summer Saturday STEM Academy on the Science of Construction, where 116 girls learned general construction terms and about construction math, plans, materials and tools of the trade. Students made slime, which demonstrates the properties of concrete, as they learned about the purpose and composition of concrete, formwork material used to shape concrete, how concrete is made and concrete placement.

Staff from W.E. O'Neil Construction, a 100% employee-owned general contractor, talked about career opportunities in the construction industry, how a developer, architect, engineer and contractor work together to build buildings, and different types of building finishes and designs. The students put this knowledge to work using dry spaghetti and marshmallows to build the tallest free-standing tower possible, and popsicle sticks and markers to build a house. A field trip to the Chicago River highlighted the city's architectural history, and a field trip to W.E. O'Neil Office and Plumber's Union Garage demonstrated real-world applications of what was discussed in the classroom. Special thanks to W.E. O'Neil Construction team members Margaret Caspers, Caroline Ketcik, Stacy Economy, Camila Marden, Sarah Fuller and Colleen Finn.



(L to R) G4S students Zoie Norals, Aishat Smith, Simi Okuwobi, Makayla Enu-Enwosu, Brooklynn Tyler build a tower.



Students prepare to practice CPR.



High School Lab Assistant Chelsea Waiters prepares bananas to be used for the practice suturing activity.



G4S Program Coordinator Natasha Carter distributes sheep hearts to students for dissection during the Health & Wellness Fall Saturday STEM Academy.

2023 SATURDAY STEM ACADEMY FALL SESSION

Health & Wellness: October 7 – November 11

The Fall Saturday STEM Academy focused on Health and Wellness. The curriculum included an introduction to healthy eating, structure and function of the heart, blood types and interactions, robotic surgery, and artificial intelligence and medicine. The Illinois Math and Science Academy taught the fundamentals of how to suture a wound using a banana and needle and thread. The 146 students who attended dissected a sheep heart, practiced phlebotomy, and learned about careers in nursing, the basics of cardio-pulmonary resuscitation (CPR), how to take blood pressure and use an automated external defibrillator (AED). There was a panel discussion with representatives from AbbVie about how drugs are developed, manufactured and dispensed to patients, and a field trip to the STEMposium Technology Conference, sponsored by Tech Equity for All in partnership with Girls 4 Science.



STUDENT RECOGNITION AND AWARDS CEREMONY



Dr. Lauren Lomax

The end of the program year was celebrated on Saturday August 5 when Girls 4 Science hosted its Annual Student Recognition & Awards Ceremony at Malcolm X City College. The featured speaker was Dr. Lauren Lomax, a Girls 4 Science alum (and daughter of Girls 4 Science founder,

Jackie Lomax). Dr. Lomax is a pediatric occupational therapist who received her Bachelor of Science degree in Therapeutic Recreation from Central Michigan University and her Doctor of Occupational Therapy degree from Midwestern University, Downers Grove, IL. While at Midwestern, she was Co-Chair for the University's Coalition for Occupational Therapy Advocates for Diversity (COTAD) Chapter and now serves as New Chapter Manager for the National COTAD Chapters Committee. Dr. Lomax received the Practice Leadership Service Award from Midwestern University upon completion of her doctoral degree in 2023. She is passionate about mentorship, service, and adventure!



(L to R) Keynote speaker Lauren Lomax, Executive Director Jackie Lomax, 2023-24 High School Lab Assistants Alesandra Dambrauskas, Carly Ng, Vivianna Nieto, Chelsea Waiters, Anbriana McDonald and Karmen Brooks, Board Chair Alan Brazil, Program Director Dezarae Brooks.



(L to R) Students Chelsea Waiters, Camille Pickett and Auri Evans with their certificates of participation.

Girls 4 Science presented the 2023 Partnership Award to the Illinois Mathematics and Science Academy (IMSA) in recognition of its long-time support of curriculum development for the Saturday STEM Academy. IMSA provides quarterly training sessions for Girls 4 Science Program Coordinators and High School Lab Assistants, hosts field trips to its campus and provides family workshops on how students can apply for IMSA out-of-school enrichment programs. Students received certificates and staff, volunteers and high school lab assistants for the 2023-2024 school year were also recognized.

LINDA MCGILL-BOASMOND SCHOLARSHIPS



Linda McGill-Boasmond was the founding Chair of the Girls 4 Science Board of Directors and has funded the scholarship program since 2018. She is owner, President and CEO of Cedar Concepts, a manufacturer of chemicals for the personal care, home, agriculture and aerospace industries, among others. McGill-Boasmond runs the country's first and only African American woman-owned chemical manufacturing plant. Since 2013 Girls 4 Science has awarded \$30,000 in scholarships for high school seniors who have completed at least 12 weeks of the G4S program and are applying for undergraduate study in a STEM field.

2023 Linda McGill-Boasmond Scholarship Recipients

Four Girls 4 Science high school seniors received \$1,000 Linda McGill-Boasmond scholarships during the Student Recognition & Awards Program.



Milan James
Southern Illinois University
Forensic Chemistry and
Microbiology



Faith Shelton
Dominican University
Biochemistry



Audra Spielman
Moraine Valley
Occupational Therapy



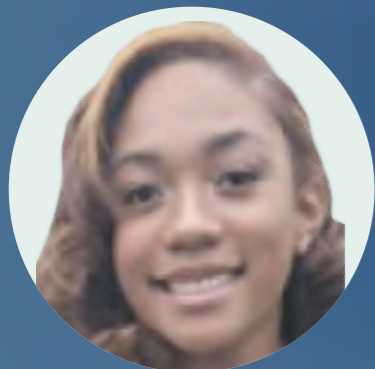
Dajah Thomas
Spelman College
Biochemistry & Minor in Chemistry



2023-2024

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 2023-24 High School Lab Assistants were recognized at the Student Recognition and Awards program on August 5.



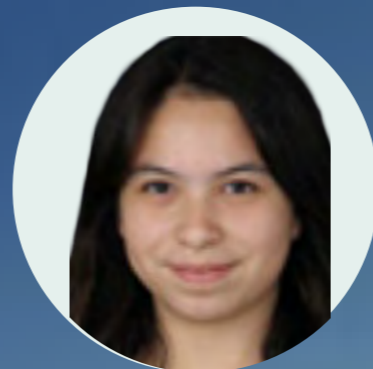
Karmen Brooks
Olive Harvey
College



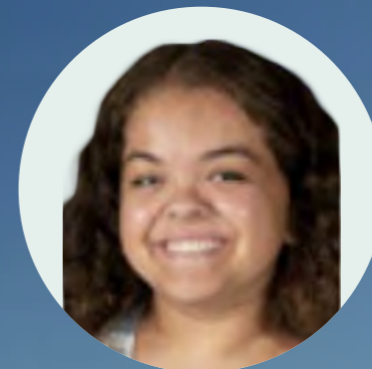
Chelsea Waiters
Olive Harvey
College



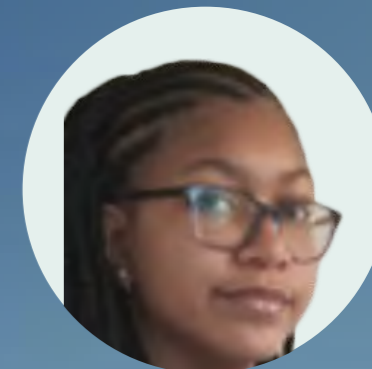
Carly Ng
Malcom X
College



Vivianna Nieto
Malcom X
College



Alesandra Dambrauskas
University of St.
Francis



Anbriana McDonald
University of St.
Francis



“The first day I attended the Girls 4 Science Saturday STEM Academy is still fresh in my mind. As a shy and nervous 5th grader, I had no idea what this program would bring me in the future. Now, having been in the program for 8 years, I am a high school senior who has had extraordinary learning experiences and improved my grades across all STEM fields. I gained a great deal of knowledge, experience, and enthusiasm for science through my years in Girls 4 Science. Thanks to Girls 4 Science, I’m positioned for success in my college years, and I’m so grateful to have gained all the knowledge I will need going forward.”

Audra Spielman
Girls 4 Science High School Senior



WOMEN IN STEM ANNUAL FUNDRAISER

**October 10, 2023 at the Hilton Contemporary Gallery
in Bridgeport's Morgan Arts Complex**

Girls 4 Science held its annual Women in STEM fundraiser on October 10 at the Hilton Contemporary gallery in Bridgeport's Morgan Arts Complex. The evening featured a reception, Student Showcase where four Girls 4 Science participants presented their projects from the past year, and the presentation of the 2023 Woman in STEM award.

HILTON
CONTEMPORARY

Thank you to our sponsors:

The event was sponsored by the Joseph and Bessie Feinberg Foundation. Special thanks to Cedar Concepts Corporation for sponsoring the Honoree Award and to Arica Hilton for hosting the event at her beautiful gallery.



G4S Executive Director Jackie Lomax, Honoree Dr. Ngozi Ezike, Board Chair Alan Brazil

Female STEM Professional of the Year

Friends, families and supporters gathered to honor Dr. Ngozi Ezike as the 2023 Female STEM Professional of the Year. Dr. Ezike is the president and CEO of Sinai Chicago, the largest private safety net health system in the state of Illinois. She is the immediate past Director of the Illinois Department of Public Health, the second woman and the first Black woman appointed to lead the nearly 150-year-old state agency. In this leadership role, Dr. Ezike guided the state and its 12.7 million residents through the worst pandemic in its history, while simultaneously working to promote health equity, particularly within communities of need.

Dr. Ezike is a board-certified internist and pediatrician, who worked at Cook County Health, serving for more than 15 years in various direct patient care and administrative roles, including medical directorships at the Austin Health Center and Juvenile Detention Center. She also delivered inpatient care at Stroger Hospital and primary and preventive care in community and school-based clinics.

She is a graduate of Harvard University and the University of California, San Diego School of Medicine, and Diplomate of both the American Board of Internal Medicine and the American Board of Pediatrics. She is the recipient of honorary doctorates from Southern Illinois University, Rosalind Franklin University, and Knox College. She has received numerous awards including the University of St. Francis' Sister Clare of Assisi Award, the 2020 Excellence in Public Service Award from the Motorola Solutions Foundation, the Lester H. McKeever Individual Service Award from the Chicago Urban League, and the Health Innovator Award from Erie Family Health Center. In 2022, she was the inaugural USA Today Illinois Woman of the Year honoree.



G4S Board member Anthony Williams (center) with supporters Edith Williams (L) and Janice Feinberg (R).

Student STEM Showcase

Four Girls 4 Science students showcased projects they completed during the Saturday STEM Academy. Amaris Koroma, an 8th grader, displayed her DIY Rollercoaster inspired by the Science of Physics session. Shreya Biswas, who is in 5th grade, presented her Water Purification system and high school student Kamryn Gibson (11th grade) presented an activity on Global Warming, both from the session on Marine Biology. The Bacteria Living Among Us was presented by Janelle Chan (9th grade) and inspired by the Microbiology session.



Amaris Koroma demonstrates her DIY Rollercoaster.

Student STEM Showcase Participants



Amaris Koroma
8th Grade
DIY Rollercoaster



Janelle Chan
9th Grade
The Bacteria
Living Among Us



Kamryn Gibson
12th Grade
The Heat is On:
Examining the Science
and Solutions of
Global Warming



Shreya Biswas
6th Grade
Water Purifier

STEM Showcase Coach



Elizabeth S. Copper,
MPH, Med

Elizabeth S. Copper, MPH, MEd is a retired Chicago Public School science educator who has taught Honors Biology, Honors Forensic and AP Environmental sciences at Lindblom Math & Science Academy in Chicago, Illinois. She has 40 years of teaching experience in public, parochial and informal educational settings. As a 2013 Golden Apple recipient, her goals are to provide students with access and exposure to excellent STEAM opportunities. Ms. Copper is the Executive Director of the CPS Student Science Fair, Inc., a 501c3 organization that supports the implementation of science research at the middle and high school levels, providing a platform for students to present their research investigations through an Annual Exhibition of Student STEM Research for over 72 years. Ms. Copper is also a part-time instructor at the Northwestern University Center for Talent Development.



GIRLS 4 SCIENCE ALUMNA

Girls 4 Science hosted an Alumnae & High School Student Summer Bowling Social on July 30 at Tinley Bowl. “As a recent college graduate, the Girls 4 Science alumnae group fosters the support I need as I transition into the workforce,” said Nakia Chappelle. The alumnae group reflected on their STEM milestones and how they could provide peer-to-peer mentorship for Girls 4 Science students.

(Back Row L to R) Lauren Lomax: G4S alum, graduate of Central Michigan University (BS Therapeutic Recreation) and Midwestern University, Downers Grove, IL (Doctor of Occupational Therapy); Nakia Chappelle: G4S alum, graduate of University of Wisconsin-Madison (pre med); Jason Briski: Volunteer mentor; Kierson Rickmon: G4S alum, at Northwestern University majoring in biology on a pre-med track; Natasha Carter: Program Coordinator Olive Harvey; Reina Carter: G4S alum, at Illinois State University majoring in mathematics; Jackie Iomax: G4S Executive Director.
Front Row L to R: Heather Velazquez: G4S parent, University of St. Francis; Windy Rickmon: G4S parent, Malcolm X.

GIRLS 4 SCIENCE ON THE MOVE

Chicago Park District Annual Teen Fair

The Chicago Park District Annual Teen Fair on March 18 at Kennedy King City College of Chicago attracted over 500 teens to learn about opportunities in the community. Teens learned about workforce readiness skills, summer employment, and vocational training. Girls 4 Science Program Coordinator Natasha Carter and Program Director Dezarae Brooks provided information about the Saturday STEM Academy and demonstrated phlebotomy from the Fall session on Health & Wellness.



Natasha Carter shares G4S program mission with attendees at the Chicago Park District Teen Fair.



Madison Robinson (left) in lab with R&D chemist, Lisa Phan

Summer Internship at Cedar Concepts

Girls 4 Science high school junior, Madison Robinson, completed a paid summer internship at Cedar Concepts, a manufacturer of chemicals for the personal care, home, agriculture and aerospace industries, among others. Linda McGill-Boasmond, founding Chair of the Girls 4 Science Board of Directors, is owner, President and CEO of Cedar Concepts, the first and only African American woman-owned chemical manufacturing plant. Madison Robinson is a junior at Lindblom Math and Science Academy.

"This summer I had the absolute pleasure of working as a summer intern at Cedar Concepts, the only female-owned manufacturer in the United States. This experience has been nothing short of amazing and I am immensely grateful for the knowledge, skills, and growth I have gained during my internship. Being surrounded by intelligent, and empowered professionals in a company run by an African American female in a male dominated industry was an inspiration in itself. Each day I was met with patience, understanding, and a genuine commitment to my development. I was given the opportunity to work on challenging projects, spend time in the lab, and assist in making products, all which pushed me out of my comfort zone. The internship allowed me to acquire new skills and build a solid foundation for my professional career. I would like to thank Linda McGill-Boasmond and her team for their investment in females like me."

Madison Robinson



Madison Robinson (center) surrounded by Cedar Concepts team

“I have been volunteering for Girls4Science since 2020 and feel so fortunate to be able to help spark excitement around science and STEM careers in young women. Girls 4 Science does an amazing job of providing education, fun and interesting hands-on experiences, and practical exposure to career paths through a network of women working in STEM. I only wish I’d had something like it when I was growing up!”

Grace Junge
Girls 4 Science Volunteer

C2ST Annual Gala

The Joseph and Bessie Feinberg Foundation hosted Girls 4 Science at the Chicago Council on Science and Technology (C2ST) Science in the City Gala on May 4. The event celebrated excellent public STEM outreach with academic and industry leaders, educators, community members, and young professionals from across Chicagoland.



(L to R) Girls 4 Science Program Coordinator Monique Puckett, student Gioia Puckett and Program Coordinator Sandrine Davis



Girls 4 Science alum Kierson Rickmon and her mother Windy Rickmon at the C2ST gala.

Monroe Capital Donates STEM Backpacks

Monroe Capital donated STEM backpacks for Girls 4 Science students. Each backpack had an inspirational STEM message and included a KidzLabs Lemon Clock kit, 6-in-1 STEM Solar Robot Kit, LED Fun Snap Circuits kit, STEM DIY car kit, Refracting Prism, and Newton’s Laws Discovery STEM kit.



Students at Malcom X City College receive STEM back packs from Monroe Capital.



Barbara Guthrie and Tina Vaughn from UL Solutions

Community Carnival

Girls 4 Science was invited to UL Solutions Northbrook headquarters for its annual Community Carnival on September 12. UL Solutions is a global independent safety science company, and its Community Carnival connects nonprofits with the company's employee volunteers. Girls 4 Science shared its mission, programs and volunteer opportunities with UL Solutions employees.



Bud Billiken Day Parade

Congratulations to Girls 4 Science student Zoe Patterson on being selected as Queen of the 2023 Bud Billiken® Day Parade Royal Court. The Bud Billiken® Day Parade – in its 94th year — is the largest, longest-running African American parade in the United States and the second largest parade in the US after to the Rose Bowl. Bud Billiken® Day Parade's Royal Court first appeared in 1949. The contest targets children of African-American descent residing in and around the city of Chicago between the ages of 11-13 years. Education is a focal point of the contest as academic essays are required for consideration. The chosen King and Queen are thought to represent all children and preside over "Bud Billiken® Land ...where things are as they ought to be." Children of the Royal Court must uphold the integrity and esteem that reflect the core values of Bud Billiken.



Zoe Patterson



Healthcare Businesswomen's Association CEO Mary Stutts and G4S Executive Director Jackie Lomax

Healthcare Businesswomen's Association Annual Conference

During its 2023 Annual Conference in Chicago on November 8, the Healthcare Businesswomen's Association donated chemistry kits and school supplies to Girls 4 Science. The conference brought together hundreds of women from all over the globe and in all stages in their careers to learn, connect, and discuss the challenges facing the healthcare industry today. Girls 4 Science was selected as the local organization to receive STEM kits sponsored by conference attendees.

Girls 4 Science Fall STEM Rally

Girls 4 Science hosted a Fall STEM rally at Malcolm X City College on September 30 to promote the Fall Saturday STEM Academy on Health & Wellness. Girls 4 Science alum Reina Carter and High School Laboratory Assistant Chelsea Waiters demonstrated a mammal heart dissection, and volunteers demonstrated CPR and phlebotomy and provided information on heart health. Families could pre-register for the Fall Saturday STEM Academy and there were DIY catapult kits and treat bags to take home.



Girls 4 Science team members at the Fall STEM Rally (L to R): Diamond Franklin, Chelsea Waiters, Brooklyn Payne, LaToya M. Hinton-Howery, Jackie Lomax, Danielle McDaniels, Reina Carter, Dezarae Brooks, Natasha Carter.



Reina Carter and Chelsea Waiters



Demonstration table at Fall STEM Rally with CPR mannequins, blood pressure reader, blood pressure literature, promotional water bottles, and DIY take home Catapult Kits



Students listen to welcome address from Sharaye Baugh (L)
Manager of Demand Planning at Ingredion.

Cool Science Investigator Summer Camp

The Cool Science Investigator Summer Camp (CSI) at the Lewis University Romeoville Campus was held July 17-20, 2023. The experience was exclusively for Girls 4 Science students in grades 6-9. The students became crime scene investigators and conducted real-world forensic DNA analysis and went from the crime scene to the medical field of cardiology to learn about how the heart works and heart health. The last two days of the program examined genetically modified organisms (GMOs) and looked at pollinators in the campus environment. The camp experience was made possible through a sponsorship by Ingredion.

“Being a part of Girls 4 Science is like an extended family of “STEM Sisters” who share the journey with me. Each Saturday STEM Academy session is unique to the interests of girls, and we build our skills with each other. For the past year I served as a High School Lab Assistant for the Saturday STEM Academy. This leadership opportunity allowed me to plan and train with the program staff and be an advocate for my peers. I provide peer-to-peer support in the lab and build upon my skills to encourage others. One memorable activity was during the Summer 2022 field trip to Flat Foot Lake at Beaubien Woods. I helped lead a water chemistry activity with our group to test the safety of the water for animals. This activity helped strengthen my interest in chemistry and I hope that I can continue the connection when I go to college.”

Dajah Thomas
Girls 4 Science High School Senior





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, and know how to gather and evaluate evidence to make decisions. These are the kinds of skills that students develop in science, technology, engineering, and math—disciplines collectively 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 literacy and STEM skills are increasingly important for all people to succeed in the workplace and in their everyday lives. To simply function as an informed consumer and citizen in a world of increasingly sophisticated technology requires the ability to use digital devices and STEM skills such as evidence-based 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 occupations. STEM workers have median wage and salary earnings of about \$64,000, higher than the \$40,000 earned by those working in non-STEM occupations."



Why Girls?

Women comprise 50% of the American population and more than 50% of the college-bound population, yet they remain underrepresented in the STEM fields, especially women of color. While nearly as many women hold undergraduate degrees as men, they make up only about 30% of all STEM degree holders.

The gender gap in STEM begins with education. In childhood and adolescence, girls' interest in STEM is dampened by stereotypes and cultural norms that consistently portray ideal scientists, engineers and technology innovators as male. Girls participate in high 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 girls take fewer of the more advanced STEM courses as they get closer to college. This gap widens the longer girls are in school and larger gaps exist between students of different racial and ethnic backgrounds or family income.

There are several measures that can help build STEM identity and interest among girls -- especially girls of color -- including extra-curricular and single-sex programs, Black and female role models and project-based instruction. Informal STEM experiences are useful to girls, as they provide unique opportunities to engage and connect with science in an inquiry-based manner without the academic requirements of memorization and standardized testing. Such programs can have profound impacts on girls at the time when they are involved, and these impacts relate directly to their confidence, attitudes, and future plans.



Why Girls 4 Science?

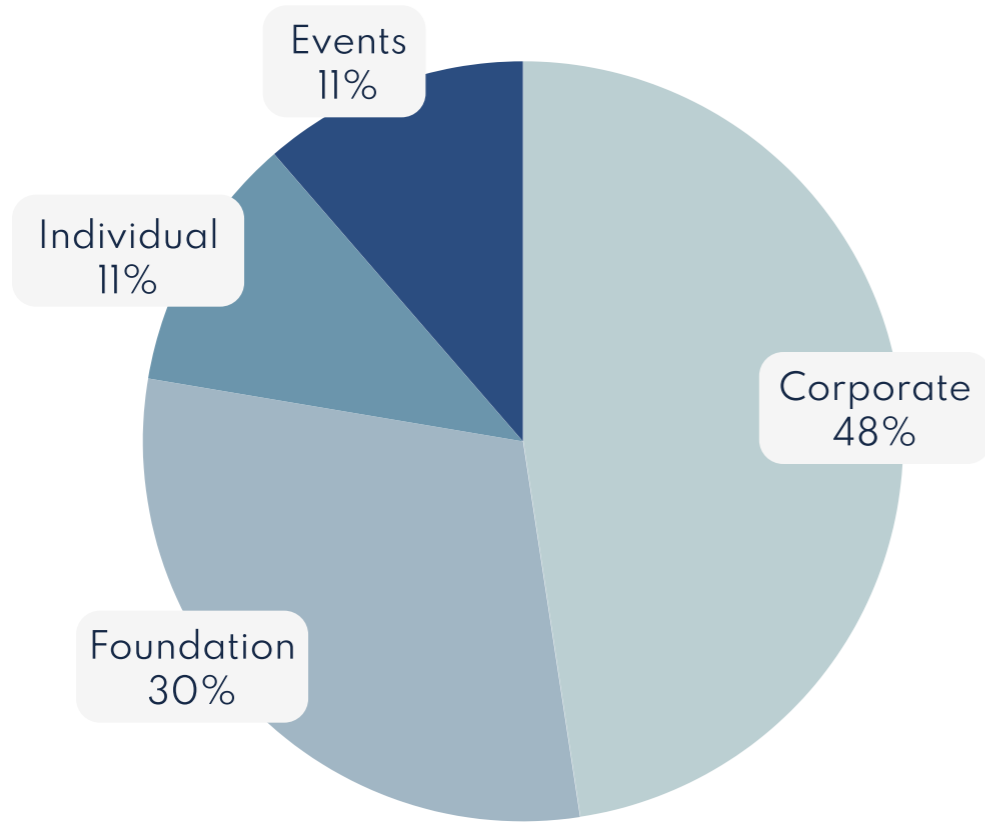
The Girls 4 Science Saturday STEM Academy's innovative program model is based on evidence that science exposure and increased science literacy will equip young girls with the knowledge and confidence needed to pursue study in the sciences and careers in STEM.

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 moderate-income 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.

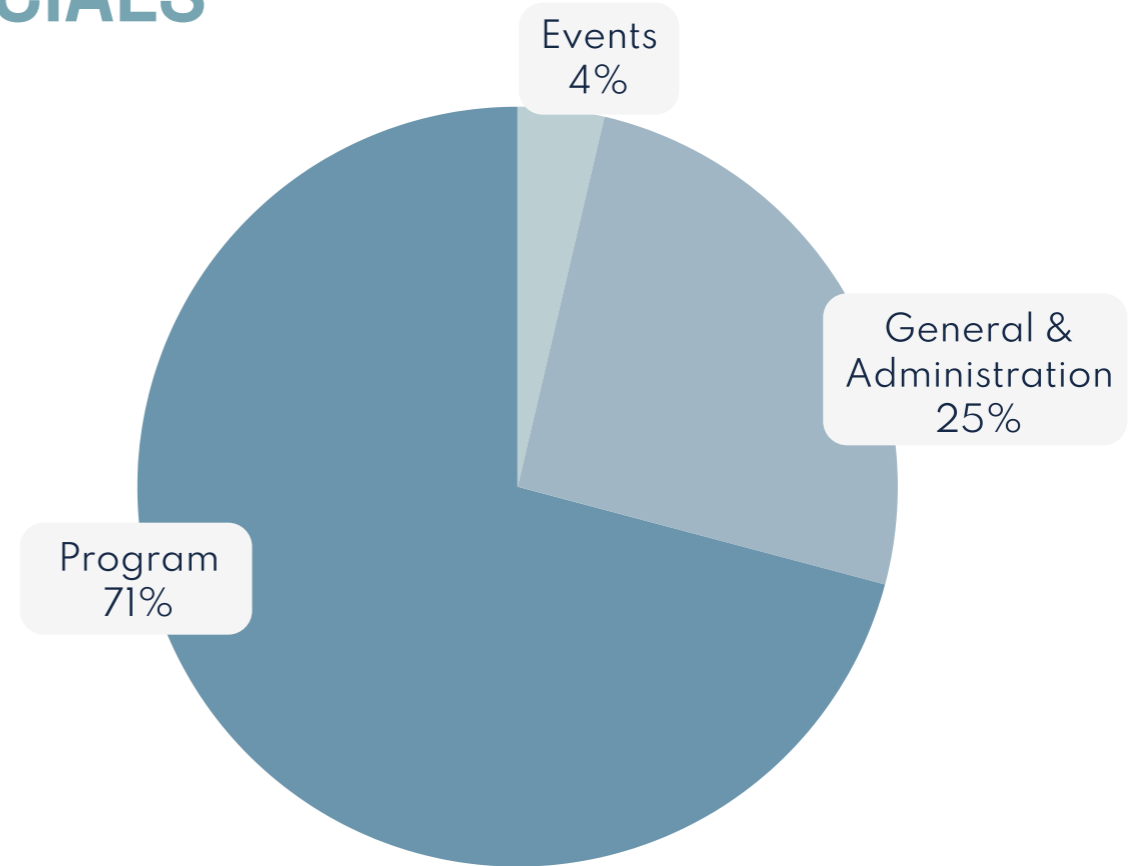
The Girls 4 Science **Saturday STEM Academy** employs strategies that have proven successful in increasing girls' interest in, positive attitudes toward, and identification with STEM. The evidence-based aspects of the program include:

- Single-sex program.
- 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-confidence and collegiality.
- 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.

FINANCIALS



Revenue
\$219,662.00



Expenses
\$260,633.00

2023 DONORS

Corporations & Foundations

\$50,000+

Joseph & Bessie Feinberg Foundation

\$25,000 - \$49,999

Belvedere Cares Foundation
Boeing Company

\$15,000 - \$24,999

Albert Pick, Jr. Fund

\$10,000 - \$14,999

Bristol Myers Squibb
Chicago Community Foundation
Chicago Trading Company
Horizon Therapeutics
Ingredion, Inc.
Knowledge Systems Institute

\$5,000 - \$9,999

NBC Comcast Universal
The Math Company

\$2,500 - \$4,999

Cedar Concepts
McGraw Foundation

\$1,000 - \$2,499

CDW
McKinstry Charitable Foundation
Olin
University of Chicago Student Society of Women in Physics

\$500 - \$999

Ingredion Charitable Foundation

\$100 - \$499

Abbott Laboratories
Abbie
Amazon Smile
Illinois Tool Works Foundation
Medtronic 200
Thermo Fisher

Under \$100

JP Morgan Chase

Employee Giving Campaigns

Abbott Laboratories
CDW
Exelon
Illinois Tool Works Foundation
Ingredion Charitable Foundation
JP Morgan Chase
Medtronic
Thermo Fisher

Individuals

\$5,000 - \$9,999

Edith Williams

\$1,000 - \$2,499

Patrick Arns
LaToya Dixon
Sonya Echols
Leah Fields
Morgan Komara
Susan Rogers, MD
Felix Villa

\$500 - \$999

Janice L. Feinberg
Jackie Lomax
Donna Mayschak
Linda Ray Murray, MD
Riva Trivedi
Danielle Zuhlke-Smith
Anthony Williams

\$250 - \$499

Brad Clark
Joyce Donaly
Ngozi Ezike, MD
John-Michael Holas
Andrea Kemp-Curtis
Kamaria Massey
Linda McGill Boasmond
Nicole Meunier
Monique Puckett
Synim Rivers
Helen Robinson
Kamlesh Sanghvi
Alexander Silverberg
Marsha Speed

\$100 - \$249

Heidi Adams
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Yaqui Benson-Woods
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Kendra Block
Pamela Borders
Carol Moseley Braun
Alan & Adrienne Brazil
Maxine Brown
Candice Cheng
Natalie Coleman
Marina Damiano
Kristie Denman
Marilyn Dixon
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Mattie Payne-Mallory
Monika Robinson
Lisa Shaffer
Marque Shaffer
Peter Simko
Cheri Wilson-Chappelle

Under \$100

Kimberly Adams
Anonymous (20)
Surudhi Asokraj
Kadence Baugh
Kimberly Baugh
Deborah Bidga
Natasha Carter
Anne Cruz
Telesia David
Wendy Donaldson
Mary Donnelly
Erika Doss

LaShanna Epting
Kanasha Fort
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Paul Voelker
Keronn Walker
Keesha Warren
Jacqueline Williams
Mary Zwick

Tribute Gifts

Address the Gender Digital Divide on International Day of the Girl
Jeremy Griffith
Surudhi Asokraj

Facebook Fundraisers For Girls4Science

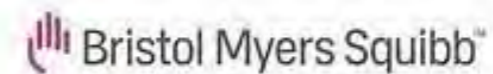
Keesha Warren-Lee
Monique Puckett

Double Good Popcorn Fundraisers

We salute the students, families, Board members, staff and friends who sold popcorn through their online stores and raised more than \$6,700 for Girls 4 Science.

Amaya Abeja
Kadence Baugh
Dezarae Brooks
Natasha Carter
Isabelle Cosentino
Onyinyechi Daniel
Kennedy & Kendall Davis
Aminah Doss
Chiquita Eames
Jenesis Freeman
Ximena Garcia
Bria Hoover
Amiya Knight
Nydia Laurel
Lauren Lomax
Ryleigh & Reagan McNair
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Kavya Sharma
Leila Silva
Riva Trivedi
Alicia Tyler
Miki Velazquez
Jackie Williams
Christin Zollicoffer

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The Girls 4 Science Advisory Board is comprised of community leaders who assist in strategic development and fundraising, planning, promotion, and execution of Girls 4 Science events.

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Tien Truong
Dominique Tucker
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