newscience

NEWS FOR MEMBERS, PHILANTHROPIC PARTNERS AND FRIENDS OF THE SAINT LOUIS SCIENCE CENTER

WINTER 2024–2025

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to Science Center President & CEO Todd Bastean for five years of leadership and impact!

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Connect with us for updates, special events and fun science.

Connect with curiosity.

Dear Friends of the Saint Louis Science Center,

As we prepare to close another year at the Science Center packed with wonders—and the why's behind them—I am grateful for the passion, enthusiasm and curiosity we see from our guests and community every day.

One of the Science Center's core values is to be Inclusive and Welcoming to All. We believe that science has space for everyone, and we value a diversity of experiences, perspectives and backgrounds. In this issue of *NewScience*, I'm proud to share more about the ways we are providing an inclusive space for people of all ages and backgrounds to explore STEM.

I encourage you to read the story of one family positively impacted by our Sensory Friendly Science Time (where the Science Center campus operates with reduced sounds, increased lighting and other modifications) and learn more about Dr. Lamara Warren, the Science Center's new Managing Director of Diversity, Equity, Accessibility and Inclusion (DEAI). Also, check out a recap of the first-ever STL for All Day, which welcomed Science Center members from our Science and Technology Learning (STL) for All membership program for a special morning of exploration at their Science Center.

In addition, you will also discover new items coming to *Inside the Vault* that will highlight a range of STEM topics, including paleoanthropology, local geology and the engineering advancements woven throughout history into the humble shoe. You can also learn more about exciting events and experiences coming in 2025, including our annual Community STEM Showcase, SciFest: Engineering Expo, the return of Summer STEM Explorers camp and much more.

Making all these experiences and the daily operation of the Science Center possible are our Science Center members, donors and St. Louis community. In this issue's Donor Spotlight, meet Simon Bailey, CEO of local geospatial firm T-Kartor USA and a member of the Science Center's Board of Trustees. See photos from our recent 11th annual golf tournament, which raised more than $60,000 in support of our work. And for those looking to further engage with us, I encourage you to learn more about the Einstein Society, a catalyzing community of supporters who help make our mission possible.

Looking ahead, I am truly energized by the ways we are continuing to spark curiosity for STEM in the St. Louis region. From all of us here at the Science Center, thank you for helping us to inspire everyone to be curious and engaged in science.

Warm wishes,

Todd Bastean
President and CEO

To inspire everyone to be curious and engaged in science. Mission of the Saint Louis Science Center

Winter Hours

Thursday–Saturday: 9:30am–4:30pm
Sunday: 11:00am–4:30pm
Monday: 9:30am–4:30pm

CLOSED Christmas Eve and Christmas Day

OPEN New Year's Eve and New Year's Day

CLOSING at 3:00pm on Monday, January 13

OPEN until 5:30pm on Saturday, January 18 and Sunday, January 19

OPEN until 5:30pm on Saturday, February 15 and Sunday, February 16

Contact

314.289.4400 | ***slsc.org***
Saint Louis Science Center
5050 Oakland Avenue
St. Louis, Missouri 63110

Membership

Services, Sales & Member Reservations:
314.289.4414
slsc.org/membership
memberships@slsc.org

Reservations

Advance Sales & Group Reservations:
314.289.4424

Education

Programming information: ***education@slsc.org***

Events

Host your next private event at the Saint Louis Science Center. Services and catering provided by Saint Louis Science Center Events. For information: 314.286.4667.

Accessibility

Complimentary wheelchairs and strollers are available in the lobby. Motorized scooters are available for a rental fee. Personal Hearing Assistance Devices are available at the OMNIMAX® Theater and Planetarium. Captiview caption devices are available for all OMNIMAX® films.

Official Partners

The Saint Louis Science Center gratefully acknowledges the support of our Official Partners.

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In This Issue...

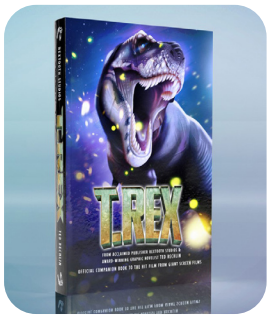
CLARIFICATION: In our previous issue, we referred to Kore Wilbert as the executive chef at the Saint Louis Science Center but neglected to mention that he is officially an employee of SSA Group, which provides the food service staffing needs of the Saint Louis Science Center. We regret the error.

Holiday Gift Guide

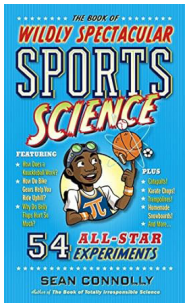
It's the gift-givingest time of the year!

Why not make it super STEM-tastic with gifts from our ExploreStore? **Members receive 10% OFF every day** and **20% OFF on Member Appreciation Night**, Monday, December 9 from 5:00–8:00pm!

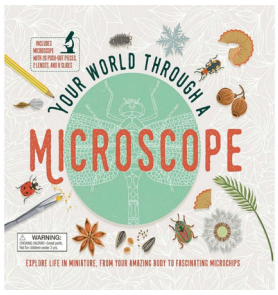
FOR TECH LOVERS WITH LIMITED REACH:
Robot Grabber Arm
($10; $9 for members)



FOR TINY TYRANT KINGS:
***T. Rex* (Official Book of the IMAX® film)**
($24.95; $22.45 for members)



FOR KINETIC LEARNERS WHO ARE ALWAYS ON THE MOVE:
The Book of Wildly Spectacular Sports Science
($14.95; $13.45 for members)



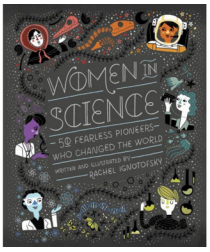
FOR VISUAL LEARNERS WHO ALSO LOVE TINY THINGS:
Your World Through a Microscope Kit
($21.99; $19.79 for members)

FOR STUFFIE-LOVING DINOSAUR ENTHUSIASTS:
Paleontologist with Dino Plush with varying hair and skin tones
($26; $23.40 for members)

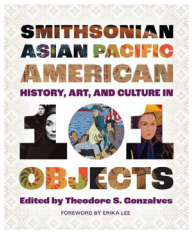
FOR KIDS WHO WILL BE TRAVELING INTO SPACE ONE DAY:
Mission Commander Doll, with varying hair and skin tones; includes lunar dig kit
($30; $27 for members)

FOR THE OUTDOORSY KIDS:
CASE IH 4-piece farm set
($40; $36 for members)
Crazy Aaron's Honey Hive
($20; $18 for members)

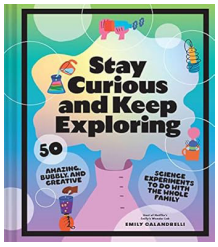
FOR BUTTERFLY LOVERS:
Butterfly Wings
($15; $13.50 for members)
The Bees, Birds and Butterflies Sticker Anthology
($27.99; $25.19 for members)



FOR KIDS EXPLORING THE PATH TO BECOMING A SCIENTIST:
Women in Science: 50 Fearless Pioneers Who Changed the World
($16.99; $15.29 for members)



FOR HISTORY BUFFS AND MUSEUM COLLECTION FANS:
Signed copy of Dr. Theo Gonzalves' *Smithsonian Asian Pacific American History, Art, and Culture in 101 Objects*
($40; $36 for members)



FOR THE ONES MOST LIKELY TO ASK "WHY?":
Stay Curious and Keep Exploring: 50 Amazing, Bubbly, And Creative Science Experiments To Do with the Whole Family
($22.95; $20.65 for members)

FOR FUTURE ENGINEERS:
Kids First Engineering Design Beginner Physics Set
($75; $67.50 for members)

UPCOMING MEMBER EVENTS

MONDAY, DECEMBER 9 | 5:00–8:00PM
Special Member Event: Member Appreciation Night
Reservations available Monday, November 11
Join us for our favorite event of the year! We'll have the entire museum activated for an evening just for members to explore. There will be free hot cocoa and coffee, the OMNIMAX® premiere of our newest documentary, *T. REX*, a Planetarium show, special presentations at Energy Stage and so much more.

SUNDAY, FEBRUARY 9 | 11:00AM–2:00PM
Member Lounge: Valentine's Day
Sessions at 11:00 and 1:00
Reservations available Monday, January 13
Share in the love of science and family fun! We'll offer treats and a Valentine creation station to help you say "I love you" to your most treasured people.

SUNDAY, FEBRUARY 22 | 9:00AM–10:30AM
New Member Expedition
Reservations available Thursday, January 23
Are you new to membership at the Saint Louis Science Center? This event is perfect for you! Join other new members as we guide you through all the benefits of being a member at the Science Center. Be sure to join in the building tour and enjoy some refreshments. Then stick around for SciFest: Engineering Expo!

THURSDAY, FEBRUARY 27 | 6:00-8:00PM
Member Mission: Inside the Vault
Reservations available Thursday, January 30
Step inside the Vault with Manager of Collections and Special Projects Kristina Hampton as she showcases and explains the new collections being displayed there. Reservations are limited due to space.

MEMBER SPOTLIGHT

JEFF RAPP

Jeff Rapp is a retired IT manager and technician for the Central Institute for the Deaf and AT&T. During his career, he also earned his pilot's license, which fueled his desire to educate today's youth about aviation. Rapp now serves as the liaison to education for the Greater St. Louis Flight Instructors Association (GSLFIA) and volunteers at our SciFest events as their representative.

HOW LONG HAVE YOU BEEN A MEMBER?

As a lifelong St. Louis resident, my interests began with the Planetarium. It's an amazing structure offering so much to all ages. When the Science Center was built and expanded that experience, I knew it offered science opportunities to my family and friends. The highway bridge provides an excellent pathway between these areas. As part of the Forest Park experience, it's a magnet for me, so much so that I joined after my first SciFest during the 2017 solar eclipse.

HOW OFTEN DO YOU VISIT, AND WHAT DO YOU LIKE TO DO HERE?

The Science Center provides education options in line with my interests and expands my learning. When the GROW Gallery was created, after spending time there, I better understood the natural resources around us. I visit at least monthly to experience speaker events like the recent Member Mission: Europa and Dr. Morhardt's presentation on the *T. rex*. The Science Center also offers opportunities for me to volunteer, which I really enjoy. I also like bringing my 5-year-old granddaughter to Saturday morning activities for kids.

WHAT DO YOU DO AT SCIFESTS?

I host my exhibit for GSLFIA, which features the knowledge available to those seeking more about aviation careers. I believe that quarterly, day-long commitment is a very worthwhile way to spend my energy.

TELL ME A FAVORITE MEMORY ABOUT THE SAINT LOUIS SCIENCE CENTER.

My favorite memories are of volunteering at SciFest and sharing my work with the GSLFIA, which is made easier through working with Ruth Watt (the Science Center's Manager of STEM Events). One of my passions in retirement is providing access to programs that aid the younger generation's quest for their career dreams. At a recent SciFest, I met a professor of optometry who offered to provide job shadowing for high school students. With options like these, students can be better prepared for life's choices. These experiences, coupled with various Science Center programs, make it easier for me to help these young learners.

WHAT TYPES OF MEMBER EVENTS DO YOU LIKE BEST?

All kinds! I can't get these experiences from any other source. The *Apollo 11* exhibition, the Mars rover presentation, the *Da Vinci* exhibition, and the most recent presentation on the Europa Clipper feed my appetite for learning. Without them, I'd spend hours searching for that level of detail. When friends ask how I learned information on these topics, I always credit the Science Center.

WHAT'S YOUR FAVORITE MEMBER BENEFIT?

I appreciate having access to cutting-edge programs and exhibition previews, along with the newest IMAX® movies.

WHY WOULD YOU RECOMMEND BECOMING A MEMBER TO ANYONE CONSIDERING IT?

Because of all the amenities it includes, like free and/or discounted tickets, free parking and more. Most of all, the Science Center provides access to exhibits and speakers not available at other institutions.

Sensory Friendly

Science Time

Written by Amanda and Sebastian Foeller

Our daughter Violet is three and has a diagnosis of Autism Spectrum Disorder (ASD). Since her diagnosis, she's shown me that she is the same curious, playful little girl she always was. She did not change, and a diagnosis didn't change her. It was her dad and I who had to educate and immerse ourselves in this new parenting journey and provide her with the support she deserves. It's a lot to process, especially in the early stages after a diagnosis, but our daughter needs us to be the same loving parents we've always been. Our life is different than we originally pictured, but it's still wonderful. Violet has taught us to slow down and appreciate life's little moments. Because she is not yet able to talk, she's also shown us that connection and communication take forms other than speaking and that love needs no words.

Before attending sensory friendly hours, our biggest struggle was crowds. Violet tended to become overwhelmed with lots of people around her, and it escalated if there were also loud noises.

When organizations implement sensory friendly hours or events, we always try to go. It is encouraging to see places become more welcoming and intentional for families like ours. Sometimes we feel like outsiders at events, and when we attend inclusive outings, I feel like we are in a judgement-free, accepting environment where kids like Violet can explore and discover, because they crave learning just as much as

neurotypical kids do. It's uplifting to see patient, friendly staff members interact with these kids, because even if the kids don't respond or look in their eyes, they take in everything that is said to them.

At the Science Center's Sensory Friendly Science Time, Violet's favorite part was visiting the fish in the Discovery Room, but she also loved seeing the quieter *T. rex* and the chickens in GROW. Seeing her happy, laughing and unapologetically herself is how I know we've had a successful outing. I appreciate the Saint Louis Science Center giving Violet the opportunity to be curious and learn in an accommodating space. We can't wait to come back!

Learn more about Sensory Friendly Science Time at ***slsc.org/accessibility***.

ALL PART OF THE PROCESS

STEM EXPERT SPOTLIGHT

Danielle Bowles-Martin serves as a process engineer at A&B Process Systems, an entity of John Bean Technology Corp. Additionally, she is President of the St. Louis Gateway Chapter of the National Society of Black Engineers (NSBE STL) and an independent product manufacturing consultant. She studied chemical engineering at Missouri University of Science and Technology and loves opportunities to get others interested in STEM. She has been privileged to engage in various opportunities to advance manufacturing of goods within diverse industries, including alternative fuels, nuclear power generation, consumer goods development, international brewing and operations, environmental waste management, drug manufacturing and process design.

What do you do?

I'm currently a process engineer working in the fabrication world, focused on designing process systems for the food and pharmaceutical industries. You can generally divide process engineers into two main groups:

1. Design process engineers create mechanical processes and systems. They put together detailed process and instrumentation diagrams that show all the vital components like piping, pumps, valves and heat exchangers that are key to making products.

2. Product process engineers dive into the actual production of things we use every day like food, pharmaceuticals, chemicals, oil, gas and cosmetics.

In my full-time role, I design processes tailored for the food and pharmaceutical industries. Independently, I consult for pharmaceutical manufacturers, especially those working with biologics, which are medications made from living cells. My consulting involves improving and auditing large-scale manufacturing operations, tackling quality risks, refining processes and coming up with strategies for process validation.

What are current and possible future applications for the work that you do?

Design and process engineering is all about planning and creating systems that make the production of medical drugs and food not just more efficient, but safer, too! Right now, we're focusing on enhancing manufacturing methods, boosting product quality and ensuring products meet health and safety regulations. My work is vital in keeping safety and quality in check, so that pharmaceutical and food products are manufactured to standard.

Looking ahead, technologies like automation and artificial intelligence could potentially revolutionize production; think faster manufacturing, tailor-made medications and a smaller environmental footprint.

How did you get interested in STEM and engineering?

Growing up, I was curious and eager to understand how things worked and how to come up with creative solutions to problems. I grew up in North City St. Louis, where my family faced our share of challenges, especially after we lost my dad to a health issue. My mom, who had one of the last-known cases of polio in the United States, sparked my fascination with the scientific breakthroughs that kept my brothers and me safe from the disease. It was inspiring to see how much progress had been made by the time Mom was born, allowing her to live with a milder form of the illness.

Although polio left her with some physical challenges, my mom became an incredible chef and a skilled upholsterer, challenging many preconceived notions about her capabilities. I witnessed her resourcefulness in developing interim solutions to everyday problems while striving for long-term resolutions. I also learned a lot about our medical and social welfare systems, especially the tough hurdles they face, like the slow pace of innovation and the high costs tied to treatments and preventive care.

My journey into engineering really began when I got involved with the St. Louis Gateway Chapter of the National Society of Black Engineers in middle and high school. NSBE showed me how I could use engineering to create solutions that help others, and I dove into this field with enthusiasm!

What is the most fulfilling aspect of what you do?

I love knowing my work makes a difference in the lives of the people who use our products. It feels great to tackle some of the challenges we face today. I also enjoy being a positive influence, just like someone once was for my mom and countless individuals whose lives have been improved through advancements in treatments and high-quality products. Plus, I get to be a role model for young folks right here in St. Louis!

Speaking of which, I'm currently the president of the St. Louis Gateway Chapter of the National Society of Black Engineers, and we invite your readers to join us in fostering and retaining the STEM talent that's so crucial for our community's growth. Please visit our website at ***nsbe-stl.org*** – everyone is welcome!

What are five things people might not know about process engineering?

1. Did you know that marketing can play a big role in food labeling? It's helpful to get familiar with terms found on your food labels so you can really know what they mean and how they're used. You can go to the Food and Drug Administration (FDA) website to learn about ingredient classifications and labels.

2. You might think apples, potatoes, bananas and even broccoli are naturally healthy, but they are likely to have been genetically modified through genetic engineering or traditional crossbreeding.

3. If you're looking to save cash on your medications, consider trying generic drugs. They provide the same benefits as the name brands but often come with a friendlier price tag.

4. The FDA works hard to protect our health by making sure food, drugs and other products for humans and animals are safe and transparent. Without their oversight, we could lose out on important information and product quality!

5. A biologic is a type of medication that comes from living organisms. Unlike traditional drugs, often made through chemical processes, biologics are created using cells, proteins or other natural substances. They are used to treat diseases, especially chronic conditions like rheumatoid arthritis, cancer and certain autoimmune disorders. Because of their creation process, biologics can be more complex and may have different effects and side effects compared to standard medications.

Do you have any advice for others who are interested in your field?

Engineering demands a problem-solving mindset, commitment to learning and collaboration skills. Effective challenge resolution involves understanding the problem, exploring sustainable solutions and preventing future issues. Success requires continuous learning, active listening, curiosity and resilience.

Welcome Back Inside the Vault

If you've walked across the Skybridge from the Oakland Building to the McDonnell Planetarium recently, you've seen our exhibit area for displaying the Saint Louis Science Center's Collections, called Inside the Vault.

For the first round of artifacts displayed in the exhibit, Manager of Collections and Special Projects Kristina Hampton chose items like elephants, seashells, a variety of lamps, minerals and much more. Members enjoyed opportunities to receive private tours of the exhibit from Kristina Hampton at a Member Mission, and these Collections on display have been enjoyed by guests passing through the Vault for nearly three years.

Well, good news! Hampton and the Exhibits team have selected new Collections objects which will be on display starting in December, making it an excellent time to head back Inside the Vault.

The newest selections from the Science Center's Collections include:

- Artifacts from the Hess Cherokee Cave Collection, gathered from Cherokee Cave below the streets of St. Louis, such as stalactites, stalagmites and even bones
- Specimens from our Ornithology Collection, including some rare and exotic birds from around the world
- Products exemplifying medical quackery (fraudulent, false or misleading information about health science) from the FDA Medical Quackery Collection
- Skull casts relating to the evolution of Early Man from our Paleoanthropology Collection
- Shoes from different eras and places on Earth, including one of the largest shoes ever made, via the International Shoe Collection
- And finally, popular culture artifacts that tie into humanity's fascination with space, known as the Weiss Space Collection

These categories were chosen based on votes from guests regarding what they would like to see in the Vault next. There's so much to see and learn in the Vault. We hope to see you there soon, whether at an upcoming member event or just taking in the fascinating items displayed there!

The WONDER of... PROPRIOCEPTION

What is it?

PROPRIOCEPTION is our perception of where our body and joints are in the space around us. We use proprioception all the time: sitting, standing, moving, bending, balancing – even eating and drinking.

We use our sense of proprioception in executing movements and movement patterns, so proprioception matters a lot when it comes to motor skills and coordination. It allows you to know where your feet are underneath you so you can balance, or in front of you when you are trying to walk, run or kick a ball. It allows you to know where your arm and hand are in front of you when you try to touch or catch something, or where your hand and fingers are when you are writing, brushing your teeth or eating a spoonful of cereal.

Proprioception and Health and Medicine

Physical and occupational therapists work to help increase proprioception in patients of all ages. This assistance could be useful for those needing help with decreased fine motor skills in their hands and fingers, decreased arm or leg function, injuries or back pain.

When joint injuries occur, even after repairing something like a torn knee ligament or a broken hip or leg bone, people have to do physical therapy to learn how to balance and walk again. This has to do not only with rebuilding strength, but also proprioception—retraining the brain and limbs to balance and move.

When someone sprains an ankle, for example, nerves in the ankle shut down, and some proprioception is lost. This impacts one's ability to balance and can lead to repeated ankle sprains if the sense of proprioception isn't redeveloped.

Use it or Lose it

Proprioception is considered a "use it or lose it" sense. For children, so many toys and activities exist to help develop proprioception. Throughout one's life, however, it's important to keep moving and doing physical activity so one's proprioceptive sense doesn't degenerate.

What's the best kind of movement? Don't just walk on a flat, even surface all the time; walk on a trail with some uneven ground, or up and down a hill. And what's the best sport for proprioception? Racquet sports force you to react to something; likewise, any activity that requires you to catch and/or hit something is useful. Even if racquet sports aren't your thing, it's important to keep moving and working your sense of proprioception so it stays strong.

Alex Butler, PT, DPT is a dedicated physical therapist who has been with Advanced Training and Rehab, a locally owned physical therapy company, for the past four years. A St. Louis native, Alex earned his Doctor of Physical Therapy degree from St. Louis University. He takes pride in serving his community, helping patients recover and improving their quality of life.

INTRODUCING

Dr. Lamara Warren

Managing Director of DEAI

Tell us about yourself.

As a preacher's kid and the eldest sibling, I grew up in a family devoted to community service. My parents' careers in government and ministry instilled in me a sense of leadership and curiosity from an early age. Math was my favorite subject, foreshadowing my future in STEM.

A pivotal moment came in high school when my guidance counselor encouraged me to attend a pre-med summer program at the University of Missouri-Columbia. As a first-generation college student, this experience, combined with my family's funeral business background, sparked my interest in forensic pathology. I pursued a biochemistry degree, but after volunteering in the ER, I realized medicine wasn't my calling.

My career in higher education began in student affairs, spanning roles in admissions, Greek life and residential life. This diverse experience led me to focus on DEAI initiatives. I held several positions at Indiana University Bloomington's Luddy School of Informatics, Computing and Engineering, including Assistant Dean for Diversity & Inclusion.

Additionally, I founded Mustard Seed Motivation, LLC, a consulting firm specializing in DEAI training and workshops. Now, I'm excited to bring this wealth of experience to the Saint Louis Science Center, where I aim to leverage my unique journey from first-generation college student to innovative STEM advocate and DEAI thought leader.

How did you get involved in DEAI work?

My journey into DEAI work began organically through my experiences as a Black woman in STEM. As one of the few Black students and women in my biochemistry program, I faced unique challenges that opened my eyes to the importance of diversity and inclusion in academic and professional settings.

My first formal role in DEAI was as a Coordinator for Multicultural Student Groups at WashU. This position allowed me to directly support and advocate for underrepresented students, drawing from my own experiences to create more inclusive environments. As I progressed in my career, I realized that my passion for STEM and my commitment to DEAI could be powerfully combined to drive meaningful change.

The importance of DEAI work, particularly in STEM fields, cannot be overstated. Science and technology shape our world in profound ways, and it's crucial that diverse voices and perspectives are represented in these fields. By promoting DEAI in STEM, we not only create more equitable opportunities for all individuals, but also drive innovation and ensure that scientific advancements benefit all sectors of society.

What can we expect to see from you in this newly created position? What changes do you foresee for the Science Center as a result of your joining us?

As the inaugural Managing Director of DEAI at the Saint Louis Science Center, I'm eager to drive transformative change through a strategic and collaborative approach. My focus will be on both internal culture shifts and external community engagement.

Internally, I'll conduct a comprehensive assessment of our practices and implement initiatives fostering equity and inclusion. Working across departments, we'll establish sustainable DEAI practices in recruiting, retention and professional development.

Externally, I'll strengthen existing partnerships and create new ones within the St. Louis community to advance our mission of inspiring scientific curiosity across all demographics of our community.

A key priority is integrating DEAI principles into the DNA of the Science Center's operations, from exhibits and programming to strategic planning and community outreach. This will result in more diverse content, inclusive communication and equitable practices.

BY BRIDGING MY GEEKY PASSIONS WITH DEAI INITIATIVES, I STRIVE TO MAKE SCIENCE MORE INCLUSIVE AND ACCESSIBLE TO ALL.

I'll also implement metrics to evaluate our DEAI initiatives, allowing for continuous improvement and celebration of successes.

Ultimately, my goal is to position the Science Center as a DEAI leader in the museum and STEM education sectors, creating a welcoming environment for all and promoting diversity in STEM fields.

What are your favorite geeky topics?

As a proud Blerd (Black nerd), my geeky interests span science and pop culture. I'm a huge fan of medical dramas like *Grey's Anatomy*, which fuel my enthrallment with human biology and medical science. My background in biochemistry keeps me engaged with advancements in genetics and biotechnology, especially CRISPR gene editing.

I'm also captivated by the intersection of technology and social issues, particularly how AI and big data can address societal challenges while considering ethical implications and potential biases. My early interest in forensic pathology has evolved, and I find the application of scientific methods in criminal investigations fascinating, especially as new technologies continue to revolutionize the field.

These interests inform my DEAI work, emphasizing the importance of diverse perspectives in scientific advancement. They underscore the need for greater representation in STEM fields and media, a cause I champion in my role at the Science Center. By bridging my geeky passions with DEAI initiatives, I strive to make science more inclusive and accessible to all.

Hospitality Heroes

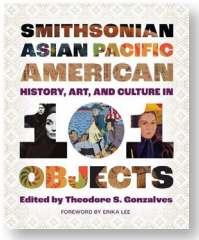
The Saint Louis Science Center is proud to honor **21 of our team members** who were named Hospitality Heroes by Explore St. Louis. The Hospitality Hero Program recognizes members of the hospitality industry who best exemplify ongoing commitment to great service. The winners are nominated by their colleagues.

We are pleased to recognize our 2024 Hospitality Heroes and their commitment to serving our guests with each visit.

Carita Alexander
Jon Baker
Callie Bayliff
Sara Cortina, SSA
David Francis
Cameron Fuller
David Gioia
Ashley Givance
Amie Green
Noni Holmstrom
Chris Lucas
Michelle McGruder
Denise Miller
Lakota Mounce
Daniel Outman
Chris Peterein
Justin Polacek
Paula Quinn
Alexis Schwamle
Doug Stanze
Cole Starcevich

Smithsonian Speaker Series Continues

On September 30th, the Science Center played host to Dr. Theo Gonzalves, who toured our collections alongside Kristina Hampton, our Manager of Collections and Special Projects. As the curator of Asian Pacific American History at the Smithsonian's National Museum of American History, he was able share a unique insight on several objects.



That evening, Gonzalves presented to a crowd of Science Center guests at Energy Stage. Featuring excerpts from his book, *Smithsonian Asian Pacific American History, Art, and Culture in 101 Objects*, he focused on objects that illustrated the concepts of "innovation." Stand-out mentions include Polynesian "stick charts" and the LOCI calculator.

If you or someone you know is interested in learning more about Dr. Gonzalves' work, you can purchase signed copies of his book in our ExploreStore, while supplies last.

INTERNATIONAL YEAR OF
Quantum Science and Technology

DID YOU KNOW THAT 2025 IS THE INTERNATIONAL YEAR OF QUANTUM SCIENCE?

The International Year of Quantum Science (IYQ) is a global celebration of one of the most transformative fields in science! From the bizarre behavior of particles to groundbreaking innovations in technology, quantum mechanics has reshaped our understanding of the universe. This year, join the Saint Louis Science Center and a worldwide community of scientists, innovators and curious minds as we explore the mysteries of the quantum world and the incredible possibilities it holds for the future. Get ready for a journey that could change the way we think about everything—from computing and communication to the very nature of reality itself. **Stay tuned for fun Quantum events in 2025!**

SUMMER STEM EXPLORERS

A summer camp for children ages 5-9

All members qualify for early registration.
Visit *slsc.org/camps*.

Celebrating the Leadership and Impact of Science Center President & CEO Todd Bastean

Saint Louis Science Center President Todd Bastean will retire this spring, concluding more than five years of vision, leadership and impact at the helm of one of St. Louis' most iconic public institutions.

In 2016, Bastean joined the Science Center's Board of Trustees and played a helpful role in developing and implementing the GROW Gallery, which debuted as the largest U.S. gallery of its kind focused on agriculture.

Bastean served as a Trustee for three years before stepping into the role of President and CEO in October 2019. In 2020, Bastean stewarded the Science Center through the global COVID-19 pandemic, guiding the Science Center team in adapting hands-on STEM learning in a socially distanced world and navigating the unprecedented disruption in how the institution's STEM programs, experiences and daily operation functioned and were funded.

During his tenure, Bastean helped guide the development of a new strategic direction, vision, mission and values for the organization in addition to overseeing the formation of a new leadership team. Furthermore, he supported a team that made new galleries, experiences and programs possible, a team that raised the bar by consistently being recognized nationally as one of the top five Science Centers in the country as well as being recognized as the number two free museum in the country. In addition, the team had the highest guest satisfaction ratings in its history, all while the Science Center substantially improved its financial position. Bastean stated, "It has been an absolute honor to lead our remarkable team. They have amazed me every day, and we are so fortunate as a community to have them."

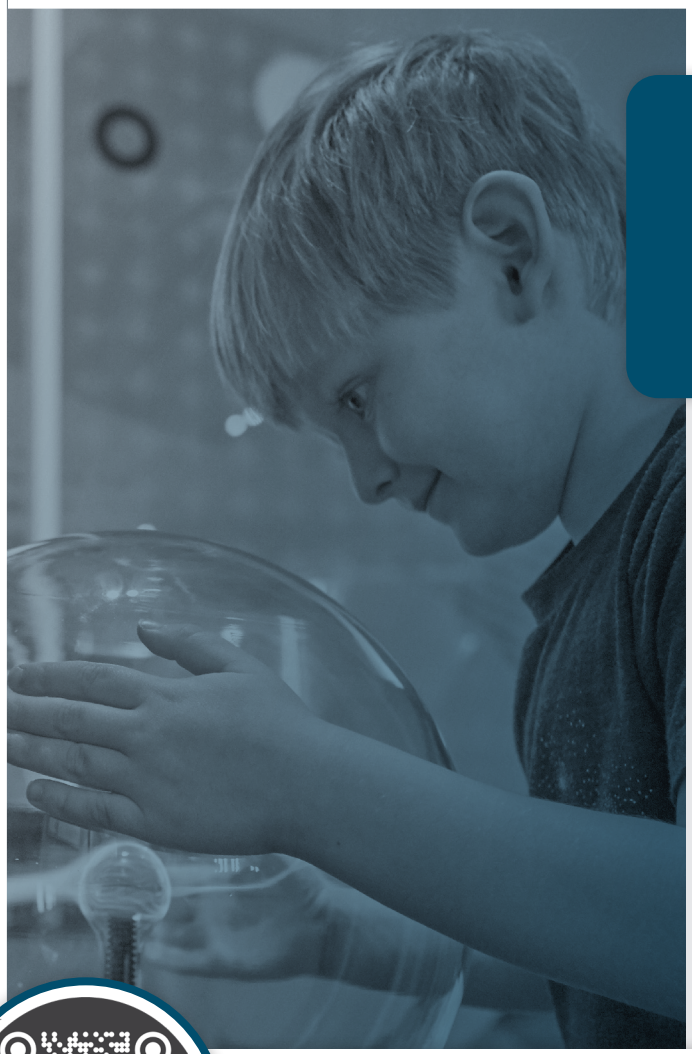
As the Science Center looks to the future and prepares for a successful transition to a new driving force behind the work we do, join us in thanking Todd for his vision, leadership and impact and the millions of lightbulb moments he helped spark at the Saint Louis Science Center!

Help us celebrate with a charitable gift dedicated in honor of Todd Bastean!

Donate to the Science Center's Curiosity Fund and dedicate your gift in honor of Todd Bastean's leadership and legacy.

Lightbulb moments

at the Science Center are powered by YOU.



As one of the few free nonprofit science museums in the country, the Saint Louis Science Center connects our region with curiosity for STEM through multigenerational science and technology programs, events and experiences.

Whether they happen inside the walls of the Science Center or out in our community, the lightbulb moments that bring STEM to life are made possible by the Curiosity Fund, one of the financial engines powering our mission **to inspire everyone to be curious and engaged in science**.

In this season of generosity, please consider making a renewed gift or adding a gift beyond your annual membership support to make an impact in the lives of people of all ages who connect with STEM at their Science Center.

General operating support through the Curiosity Fund helps the Science Center serve hundreds of thousands of people each year through open STEM galleries, free public events and much more.

Thank you for considering a gift to the Curiosity Fund and helping us deliver the lightbulb moments that empower future generations through STEM learning.

Inspired to support our work? Visit ***slsc.org/donate*** or scan the QR code to make a one-time gift or a monthly recurring gift. Please see the reply envelope attached for your convenience to make a gift by mail.

FOOD FIGHT: Three squabbling teenage *T. rex* siblings are brought to life in the new documentary *T. REX*
Photo Credit: Giant Screen Films

THIS WINTER AT THE

OMNIMAX® Theater

T.REX

Dr. Tyler Lyson, curator of vertebrate paleontology at the Denver Museum of Nature and Science, stars in our newest OMNIMAX® documentary, *T. REX*. This film incorporates past and present, science and art, culture and history into one seamless and fascinating tale about three kids who found a *T. rex* – and what happened next.

"Every hero, every villain, has an origin story," quips Sam Neill narrating *T. REX*. Share your origin story as a paleontologist – and, therefore, a hero of science learning.

I grew up in Southwestern North Dakota in the Hell Creek Formation Badlands, so as a child obsessed with dinosaurs, it was the perfect place to grow up. My earliest memories are of finding dinosaur fossils. Every year I brought my little shoebox of treasures to the local bunkhouse, where the bone diggers and scientists stayed, and they helped me identify them, and some took me out in the field. So that's how I got started: finding fossils, just like the kids in the movie who made this amazing discovery, and that's why it's so special to me.

Kids who didn't grow up near the Hell Creek Formation are just as likely to be fascinated by dinosaurs as ones who did. What can caregivers and teachers do to sustain that curiosity for kids in other regions so they, too, can grow up to become paleontologists?

They should get their kids out in nature. There are fossils in every state and worldwide, and amazing discoveries yet to be made. People may think all the paleontological discoveries have already been made, and that's just not true. This is the best time to become a paleontologist. There are more new species of dinosaurs being named now than at any other point in human history.

What discoveries led to an understanding of the *T. rex's* roar?

A lot of that has been artistic license, but there have been some soft tissue parts preserved in the larynxes of some of these dinosaurs, [suggesting] the *T. rex* didn't have a very loud roar. It was probably much calmer. And we know dinosaurs and birds are related, so that's where we can start, and birds are very vocal, but they don't have roars. So we know dinosaurs were likely vocal, and other close relatives, crocodilians, make peeping noises when they're signaling to mates or their young. There's this idea that dinosaurs are big, so they have to be scary, so they must roar – but more of the science now indicates that they likely would not have had a big roar.

How do you think the argument over skin versus feathers on the *T.rex* will end: feathers? Scales? Will we ever know for sure what the *T. rex* looked like?

At some point, one of your readers, or a future paleontologist, is going to discover a *T. rex* with most of its soft tissue preserved. I'm excited about that discovery. And I think we're probably going to meet somewhere in the middle. We know relatives of the *T. rex*, their Chinese cousins, had big, ornate feathers. I'd guess that young tyrannosaurs had downy, very simple feathers, and that when they got older, most of those feathers disappeared. The body of an adult tyrannosaur would likely be mostly covered with scales.

According to the film, the ancestors of the last *T. rexes* began life the size of housecats. Would larger, more famous *T. rexes* have begun life at such a tiny size?

We know that *Tyrannosaurus rex* hatched from a very small egg, and grew very quickly into the giant monster that it eventually became, but we have different relatives of *Tyrannosaurus rex* around North America that would have started out very small, based on everything we know about dinosaurs and eggs. The eggs of long-necked dinosaurs, which we do have, are about the size of a softball. All the eggs we have found have been very small, so we expect the *T. rex* to have a similarly sized egg. But somebody needs to find a *Tyrannosaurus rex* egg. Another future discovery!

Natalie Toth and crew excavating at the dig site: An expedition team from the Denver Museum of Nature and Science works hard to excavate the *T. rex* specimen as seen in the documentary *T. REX*. Photo courtesy Giant Screen Films.

What evidence supports the idea that "teen *rexes*" fought over food?

There have been over 100 individual [*T. rex*] specimens found, but only a handful of those are teenagers. Holes in the sides of their skulls indicate they may have undergone some face biting – which crocodilians do – and that's one of the explanations for where the holes are found. Our new specimen doesn't show any holes; maybe it was a very polite teenager, or maybe it was the boss who did all the biting.

How many dinosaurs remain in the Hell Creek Formation?

Billions! That's the great thing about paleontology. Dinosaurs were around for about 140 million years. So many dinosaurs are buried deeply in the ground. There are constantly new dinosaurs eroding out of the badlands of the Hell Creek Formation for future scientists to find. Future *T. rexes*, *T. rex* eggs, mummified *T. rexes* might not weather out for 50 years or 1000 years, but they are in the hills somewhere. That should be inspiring for the next generation of paleontologists.

What would you like to say about the film?

The film captures raw emotions. From the moment we realized we were digging on a *T. rex* to the Blackhawk helicopter extraction, the film crew was there for all of it. Often in these documentaries, they ask scientists to recreate something, but we are not actors.

Sharing this with Jessin, Liam and Kaiden, who made the discovery, has been very special. I've been fortunate to make some fun discoveries, but this one has been amazing because of the three boys who made this discovery. Seeing their reactions to seeing themselves on the big screen has been great.

Dr. Lyson describes the fossil to Jessin, Liam and Kaiden: Paleontologist Dr. Tyler Lyson explains how his team will begin excavating the fossil discovered by the boys, as seen in the documentary *T. REX*. Photo courtesy Giant Screen Films.

FIRST FRIDAY

UPCOMING FIRST FRIDAY

DECEMBER 6

Lord of the Rings

We hope you've had your breakfast, second breakfast and elevenses this First Friday! Jam-packed with some "precious" fun, we'll dive deep into some of the myth and reality behind this beloved franchise. Closing out our 2024 First Friday schedule with a bang, this is "one night to rule them all!"

IN 2025

Stay tuned to our website for exciting STEM programming updates!

Inclusive Barbie

The 2023 hit film *Barbie* gave us all some things to think about in terms of gender equity, whether in our own world or in Barbie's. To celebrate the film and the iconic doll who inspired generations of girls to be successful women, we focused our October First Friday on Barbie. But gender equity is only one way Barbie helps us think about how our world is changing as we learn more about how to apply diversity, equity, accessibility and inclusion concepts to our lives and workplaces.

The First Friday team introduced American Sign Language (ASL) interpreters at First Friday Energy Stage presentations last year, and this collaboration led them to reach out to interpreter and founder of the Willow Tree Project Xane Kimber and their friends Baylee Ridings and Sonya Smith, who were happy to share their experiences and the importance of inclusion of the Deaf community at an Energy Stage presentation during First Friday: Barbie.

Kimber, who became interested in learning and interpreting ASL by watching music interpreters, met Smith and Ridings socially. Ridings, a high school English teacher and ASL instructor, was born hard of hearing, while Smith, who works as a vocational rehabilitation counselor with the Department of Elementary and Secondary Education in Missouri, lost her hearing after a high fever and ear infections. For all three, little is as important as educating others about the Deaf community to increase inclusivity efforts throughout the hearing world. Ridings opted not to use an interpreter and used ASL and English at the same time.

Ridings began the presentation by reminding the audience that "Barbie says we all can be anything we want – and we should," citing examples of Barbies in all types of careers, from all types of backgrounds and showcasing a variety of abilities. Next, Kimber used technology to demonstrate the difficulties faced by the Deaf community daily.

Addressing some common misconceptions, Smith explained that ASL is not English, and that translating English into ASL can take time, reminding the hearing audience members to be patient with Deaf people as lip reading isn't very accurate, some do not like to use their voices and using an interpreter might take extra time.

Ridings told the audience that eye contact is crucial when communicating with hard of hearing people, explaining that "facial expressions are part of ASL grammar" and clarifying that eye contact means trust, and even though it can feel awkward, "That's okay! We can be awkward together."

Ridings explained that the Deaf community has pushed for accessibility measures like open captions at movie theaters, ASL interpreters and visual cues or prompts in public places for years, and that these measures not only help the Deaf community access the information around them but also help keep them safe in a hearing world. She added that the main goal of the Deaf community is always increasing awareness so that "people will see the urgency for these accommodations in the future."

Ridings illustrated the importance of including ASL interpreters using her own experience: "I did not learn sign language until I was 15 years old. I tried hearing aids, and I hated them. They gave me headaches and were overstimulating, so I decided to learn ASL. For me, I wanted to learn to have access to the world. It is difficult and overwhelming to try and navigate a world made for hearing people."

Kimber added, "This goes for a lot of identities, as well. The world was built for certain people, and if you don't fall within those categories, that is okay!"

Smith, who was crowned Miss Black Deaf America in 2017, explained that when she attended a mainstream school as a child, she sometimes missed out on information that teachers spoke aloud while writing on the board with their backs turned, but that she was lucky to have a note taker. However, accessibility measures were much improved in her college experience at the Rochester Institute of Technology. She emphasized that people should talk to Deaf people directly rather than talking to their interpreters, and to ask Deaf people their preferred method of communication.

Ridings feels that while advancements in AI and video interpretation are gaining attention, they will likely never eliminate the need for in-person ASL interpreters, whom she explained provide the best form of access. "ASL is a complex language that cannot be replaced by AI," she explained. "Computer screens freeze, and technology can be unreliable. This is frustrating and defeats the purpose of access."

Kimber offered suggestions on how the hearing community can help support the Deaf community in their pursuit of accessibility, including "Pick up a little ASL every day" and "If you are planning an event, plan to have interpreters." Kimber explained that interpreters should be viewed as tools used to assist the Deaf community in communication, not unlike ramps used to assist wheelchair users.

Thank you to our guest presenters for sharing their perspectives with our First Friday audience so we can all work toward a more accessible world for the Deaf community. As Smith says, "Accessibility is all that matters."

Resources:

Xane Kimber's ASL organization, The Willow Tree Project: *thewtp.org*

Atomic Hands, an organization devoted to ASL access in STEM fields: *atomichands.com*

DID YOU KNOW?

The Saint Louis Science Center offers adjustable captioning devices, hearing assistance devices with optional descriptive video services and hearing loop assisted listening systems at the OMNIMAX® Theater. The McDonnell Planetarium offers hearing assist devices for Star Shows, as well. Visit ***slsc.org/accessibility*** to learn more.

Talking STRUCTURES

With Philip Leachman

MANAGING DIRECTOR OF OPERATIONS

Growing up, I knew I wanted to be an engineer. My father taught me a lot about the mechanical and electrical systems we interact with every day. Dad, my brother and I loved boating and were teaching ourselves to build a human pyramid while water skiing. My brother was the one to climb onto our shoulders. We practiced for days and always got close, but my brother kept falling from the top because he couldn't hold onto the rope. As we talked about what wasn't working, we realized that the ropes, which were coming from one point on the boat, needed to be different lengths. In building the pyramid, we had created a triangular support structure. So we utilized the Pythagorean Theorem ($a^2+b^2=c^2$) and realized we should lengthen my brother's rope by a specific number of feet. We made this one change, and the next time we tried, we built the pyramid with ease. It was cool to see how a math concept I learned in school was so integral to accomplishing this feat.

My first job, as an electrician's apprentice, enabled me to appreciate and enjoy the technical detail that goes into making everyday things. I earned a bachelor's degree from the University of Kentucky in Mechanical Engineering, and then I worked for Procter & Gamble manufacturing dishwasher Action Pacs. I enjoyed designing, operating and maintaining complex manufacturing equipment and processes that made products at blinding speed and scale, as well as the systems engineering aspect – understanding the effects upstream changes would have on downstream processes and results. I've lived and worked in St. Louis for the past 12 years, and my growing family and I love coming to the Science Center to explore.

Guests love the area in the Structures gallery where they can build the St. Louis Arch to Gateway Arch. I also really enjoy the area that explores tuned mass dampers and base isolators for structures. Knowing that buildings deal with movement and varying dynamic loads continuously, it's important to learn about the structural engineering tools used in some of the world's most massive structures, or even in a simple bridge people might drive over without much thought about its engineering.

I think kids can walk away from Structures learning there can be different ways to accomplish a task like building a bridge. Understanding and taking inspiration from the concepts in Structures helps build the skills we need our future engineers, architects and scientists to possess to creatively design cities of the future or tackle the housing needs of the world.

SciFest

SciFest: Engineering Expo

SATURDAY, FEBRUARY 22 | 9:30AM–4:30PM

Celebrate Engineering Week 2025 at our free event showcasing the creative problem-solving process that engineering is all about. Meet and learn alongside real engineers and STEM experts who build, invent and impact the world around us. Participate in a variety of hands-on activities, demonstrations and presentations. Find inspiration for applying your own creative abilities, and perhaps discover next steps toward a new hobby or career path.

See the latest news about SciFest at ***slsc.org/scifest***.

JAMES S. MCDONNELL PLANETARIUM

Telescope Viewing

SOLAR SUNDAYS

Daytime solar telescope viewing is provided outside the McDonnell Planetarium as part of our regularly scheduled Solar Sundays program. A variety of solar telescopes and safe viewing techniques are used to provide guests safe views of the Sun, including the ability to see features like sunspots and solar prominences.

Solar Sundays take place on the third Sundays of the month from 11:00am to 3:00pm, so solar telescope viewing will be scheduled for December 15, January 19 and February 16 (weather permitting, of course). After Memorial Day, once-weekly Solar Sundays will return.

Telescope viewing at the McDonnell Planetarium is made possible thanks to partnerships with the St. Louis Astronomical Society and the River Bend Astronomy Club.

ASTRONOMY DATES

DECEMBER 13–14

Geminid Meteor Shower Peak

The annual Geminid meteor shower will peak on the morning of December 14. Typically one of the year's best displays, the nearly full moon is likely to spoil all but the brightest meteors in 2024.

DECEMBER 21

Winter Solstice

The start of astronomical winter in the Northern Hemisphere. On this day, the Sun will rise at 7:15am CST and set at 4:43pm CST in St. Louis, providing less than 9.5 hours of daylight.

JANUARY 15–16, 2025

Mars at Opposition

Roughly every 26 Earth months, Mars reaches opposition. This means Mars rises opposite the Sun in our sky and will be visible all night long. Mars will also be near the closest point to Earth in its orbit, allowing it to appear at its brightest.

JANUARY 29, 2025

Lunar New Year

Millions of people around the world will celebrate the start of a new lunisolar year on January 29. Lunar New Year usually occurs on the second new moon following the winter solstice. In the Chinese Zodiac, this begins the Year of the Snake.

SEE A STAR SHOW!

MEET THE TEAM:

New YES Program Managers

Doug Schilling

Agriscience Focus Area Manager

Doug Schilling grew up on a grain and livestock farm, graduated from Southern Illinois University Carbondale with a degree in Agricultural Education and has devoted himself to advancing agricultural education. He now serves as the Youth Exploring Science (YES) Program's Agriscience Focus Area Manager, where he channels his passion for STEM into creating engaging learning experiences for teens.

Previously an agriscience instructor at Cahokia and Staunton high schools, he designed curricula for animal science, ecology and horticulture courses, managed greenhouse and hydroponic systems, and supported Future Farmers of America (FFA) and Jr. Minorities in Agriculture, Natural Resources, and Related Sciences (Jr. MANRRS) programs. Now he leads the YES Agriscience Focus Area, expanding outreach and overseeing educational activities. Outside work, he continues to assist on his family's farm and enjoys hiking and gardening. Schilling is committed to promoting STEM education by helping teens grow, cook and explore agricultural careers while emphasizing the benefits of nature and nutrition.

Maya McGregory

Aerospace Focus Area Manager

Maya McGregory, the new YES Aerospace Focus Area Manager, joined the Science Center team in May. A former YES Teen (2015-2019), her journey began in the entrepreneurship focus area, which ignited a passion for business and led her to earn a degree in Business Marketing from the University of Kansas. Since then, McGregory has explored a variety of interests, from small business consulting to poetry and spoken word art. These diverse experiences, though they may seem unconventional to some, reflect a deep commitment to growth and creativity. Returning to YES feels like a full-circle moment, and she is excited to give back to the youth of St. Louis, particularly those within marginalized communities.

"It's always a blessing to be entrusted with the minds of young people," McGregory shared, emphasizing her passion for supporting and inspiring the next generation of YES Teens. Her leadership and enthusiasm are sure to help shape the future of the YES Teens focused on aerospace.

FREE EVENT!

Join us for the Community STEM Showcase

SATURDAY, JANUARY 18 | 10:00AM-4:00PM

In January, join us for our annual Martin Luther King, Jr. weekend event showcasing the diversity of the STEM – science, technology, engineering and math – community in St. Louis.

At this free all-day event, participate in hands-on STEM activities and interact with a number of local organizations and experts from a range of science, technology and art backgrounds and perspectives. See presentations at Energy Stage led by STEM role models.

Plus, meet and interact with teens from the Science Center's Youth Exploring Science (YES) Program. Learn more at ***slsc.org/event/community-stem-showcase***.

Web Accessibility

Accessibility for our website guests is very important to the Saint Louis Science Center. We have many onsite tools that help our guests make the most of their experience, and also we offer better accessibility through our website to be more inclusive.

When you see the icon for accessibility (the person in a blue circle shown below), you have access to such options as:

- A built-in screen reader
- Ability to adjust contrast
- Ability to visibly highlight links
- Ability to adjust text size and spacing
- Ability to hide images
- Dyslexia friendly fonts

You can also move the icon to another part of your screen, or hide it if you do not require accessibility assistance. By clicking or tapping on the icon, you can scroll to the bottom of the widget and choose "Move/Hide Widget" and position or hide the tool as you see fit.

People who use the widget can set it and forget it. The next time they visit, their settings are ready to go to make their digital experience better!

STL for All Day Welcomes Families and Individuals in the STL for All Membership Program to Their Science Center

On Saturday, September 21, the Saint Louis Science Center held its first ever STL for All Day, welcoming Science Center members from the STL for All membership program for a morning exploring and experiencing all that the Science Center has to offer.

The Science and Technology Learning (STL) for All membership program, which launched in 2023 in partnership with the Urban League of Metropolitan St. Louis, currently offers approximately 500 households served by the Urban League a free Science Center membership. Over the coming years, the Science Center plans to continue growing the program with other community partner organizations, supporting the Science Center's strategic pillars of Community Alignment and Equity and Inclusion.

STL for All Day served as a unique opportunity to welcome families to their Science Center with hands-on STEM activities, screenings of the OMNIMAX® Theater film *Blue Whales*, esports programming and more. Families could ask questions about how to use their membership benefits and, after the day's scheduled activities, explore the rest of the Science Center.

Dr. Lamara Warren, Managing Director of DEAI, and members of the Science Center's Institutional Advancement team, including Chief Institutional Advancement Officer Bobby Sanderson, were on hand to greet families at the check-in table. There, attendees received a Science Center backpack before heading down to the multipurpose T-Rex Room for snacks, refreshments and blue whale-themed activities.

Inside the T-Rex Room, STL for All members could try a hands-on activity using rosemary, tweezers and fine-toothed combs to explore how blue whale teeth are suited to catching creatures like krill for food; visit a "conversation station" with a Science Center educator to learn and ask questions about blue whales; and grab an activity booklet with blue whale facts and a space to record thoughts and observations.

In the nearby Dino Den, team members from the Science Center's Esports Program held education sessions on topics like healthy gaming habits and the basics of video game design, as well as free play sessions.

THANK YOU

Special thanks to **Drury Hotels** and **Mastercard** for their generous support of the STL for All membership program and helping us inspire everyone to be curious and engaged in science!

The Science Center's 11th Annual Golf Tournament Raises **More Than $60,000** in Support of STEM Education.

With the support of our sponsors, donors and golfers, **this year's tournament raised over $60,000** in support of the Science Center's mission to inspire everyone to be curious and engaged in science and the STEM programming and experiences that serve hundreds of thousands of people each year, empowering our community today to become the innovators of tomorrow.

Under sunny skies at Norman K. Probstein Golf Course in Forest Park, golfers enjoyed beautiful weather and 18 holes of golf, skills competitions and more. With more than 30 raffle items available, attendees took home prize packages from the St. Louis Cardinals, Saint Louis Blues, and St. Louis CITY SC, as well as Case IH, Heartland Coca-Cola, Nestle Purina and more.

Earning the award for 1st Place, the team from the **CPS Group** were recognized as the tournament winners. **The Cannonball Agency** took home 2nd Place, and **Madison County Wood Products** earned the 3rd Place trophy.

See more photos from the day at ***slsc.org/golf-2024***.

1st Place tournament winners, The CPS Group

2st Place, The Cannonball Agency

3st Place, Madison County Wood Products

Thank You

Special thanks to our presenting sponsor, AT&T.
Thank you also to our generous tournament sponsors and players for helping support STEM education and the Science Center at our 11th Annual Golf Tournament, and special thanks to this year's golf tournament chairman, Jerome Harris, President of Urban Golf of Greater St. Louis and a member of the Science Center's board of trustees, for helping make the tournament a success!

Have questions or thoughts on how corporate or foundation partnership with the Science Center can inspire the innovators of tomorrow?

Contact Christine Cox,
Manager of Sponsorship and Promotions,
at *christine.cox@slsc.org* or 314.289.4499.

Saint Louis Science Center
EINSTEIN SOCIETY

Improve lives, *transform* communities and *empower* future generations in the Einstein Society.

Help the Science Center—one of the few free nonprofit science museums in the country—serve hundreds of thousands of people each year through our mission to inspire everyone to be curious and engaged in science. **You'll also be included in special opportunities to enhance your experience with the Science Center and see up close the work you're helping make possible.**

Join the Einstein Society and help connect the Science Center's legacy of impact with the latest in STEM education and innovation for the St. Louis region, enhance science literacy and foster important 21st century skills for the leaders and careers of tomorrow.

The Einstein Society is a catalyzing community of supporters who share our vision for a world where everyone is empowered to discover what science makes possible. In the Einstein Society, you can energize the Science Center by supporting...

- Hundreds of interactive hands-on experiences at the Science Center
- STEM programming throughout the St. Louis community
- Iconic venues like the James S. McDonnell Planetarium
- Free public events like SciFest, First Friday, Community STEM Showcase and more
- New initiatives like our STL for All membership program
- Our work to create a place where everyone can discover together and forge the future of the St. Louis region

All Einstein Society levels are included in these special opportunities:

- Invitation to VIP reception hosted by the President and CEO
- Invitations to exclusive VIP events
- Recognition in the Science Center's Annual Report

You will also enjoy Science Center membership benefits, including 10 daily OMNIMAX® Theater*, McDonnell Planetarium Star Show and Discovery Room tickets; 10 daily discounted special exhibition and feature-length film tickets; free parking and more.

**Does not apply to feature-length films.*

Join today or learn more at *slsc.org/einstein-society*.

Honor Roll

This list reflects Einstein Society members from November 1, 2023–October 31, 2024.

President's Council

Kelly and Mark Bulanda
Steph and Michael Heim
Carol B. Loeb
Anne and John McDonnell
Elizabeth and James McDonnell
Margot and Edward Monser
Peggy and Andy Newman
Barbara and Andrew Taylor
Kerith and Frank Thurman
Judith A. Toombs
Risa Zwerling Wrighton and Mark Wrighton

Fellow

Sandra Blasingame
Emily and Colin Frost
Jennifer and Jeffrey McDonnell
Margaret Ritter
Chrissy Taylor and Lee Broughton
Laurie and Raymond Van De Riet

Patron

Kimberly and Todd Bastean
Amy and G. Patrick Galvin
Carol Garr
Barbara and David Gifford
Barbara and Michael Hurst
Robert and Mary Krieger
Rachel Presti and Deryck Jeremy Williams
Nancy and Eric Seiler
Sarah Trulaske
Ellen Uhlemeyer
Linda and Peter Werner
Anonymous

Member

Carol Robert Armstrong
Martha and David Aronson
Robin and Simon Bailey
Robbie and Ted Beaty
Kim Beisman and Alan Silverberg
Barbara and Barry Beracha
Josephine and Douglas Brockhaus
Sue and Mark Bronson
Deborah and Samuel Bross
Nancy Buth
Barry Cervantes
The Chod Family Foundation
Marcy and Richard Cornfeld
Mrs. George B. Desloge
Dyann Dierkes
Hazel and Arnold Donald
Michael Donald
Ellen and Henry Dubinsky
Rosemary and Robert Emnett
Steven Ensor
Lorraine and Steven Feiner
Susan Getzschman
Edward Goedeker
Kathryn and George Gokel
Jenna and Matthew Gorlewicz
Elizabeth and Tim Hampton
Tracy Hart
Virginia Heagney and James Tobin
Margaret and Michael Heinz
Judith Ho and Richard Schulz
Margie and Edward Imo
Joanne and Joel Iskiwitch
Margaret and Martin Israel
Christine Jacobs and Hank Webber
Bettie Johnson
Cheri and Wayne Jones
Constance and Eugene King
Judy and James Kiske
Carol and Ward Klein
Fran and Roger Koch
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DONOR SPOTLIGHT:

Simon Bailey

CEO of T-Kartor USA

Simon Bailey's engagement with the Saint Louis Science Center exemplifies the forward-thinking leadership that drives both community impact and technological advancement. As CEO of T-Kartor USA, a geospatial firm at the forefront of mapping, wayfinding and urban data solutions, Bailey brings invaluable expertise to the Science Center's Board of Trustees.

His commitment goes beyond governance—he also joined the prestigious Einstein Society, demonstrating philanthropic support for the Science Center's mission to spark curiosity and scientific engagement. Bailey's involvement is a strategic bridge between the growing geospatial industry and public science education, highlighting how fields like geospatial technology intersect with everyday life.

Read on to learn more about Bailey's background in the geospatial industry, the ways geospatial science impacts the world around us, and what motivates him to make an impact through the work of the Science Center.

Can you share a bit about your experience with the geospatial industry and how you've seen its importance (and impact) evolve?

My journey in the geospatial industry began well before my role with T-Kartor. I've held various positions that deepened my understanding and appreciation of how location-based technology can impact multiple sectors. Throughout my career, I've seen tremendous shifts, especially in how geospatial data is integrated with other technologies. The transition from traditional mapping to advanced GIS (Geographic Information Services) solutions powered by AI and machine learning has been remarkable. I've had the opportunity to work on both proprietary and open-source platforms, which has given me a unique perspective on how open-source technologies are driving collaboration and innovation within the industry.

For those who may not be familiar, what can you tell readers about the work T-Kartor does?

T-Kartor is a global leader in geospatial solutions, specializing in mapping, wayfinding and data management for cities, defense and government clients. Our team creates detailed maps and supports public safety, transportation and urban planning projects, among other initiatives. In the U.S., we work closely with entities like the National Geospatial-Intelligence Agency on projects involving aeronautical data, which plays a critical role in aviation safety. We're also known for our wayfinding projects, helping cities and transit systems enhance navigation and accessibility for residents and visitors alike.

Can you tell us a little about some of the big picture ways geospatial science impacts our daily lives?

Geospatial science is vital because it enables a deeper understanding of our world through data-driven insights. Globally, it's essential for addressing challenges like climate change, urban planning and disaster response. For the St. Louis region, where the geospatial sector is rapidly expanding, it represents an economic engine that attracts talent and drives technological innovation. It's incredible to see how St. Louis is positioning itself as a hub for geospatial innovation, with organizations like T-Kartor contributing to this growth.

What motivated you to join the Science Center's Board of Trustees? How do you hope to support the work we do?

Joining the Science Center's Board was driven by my passion for fostering educational opportunities and engaging the community in meaningful ways. I see the Science Center as a pivotal institution that can inspire curiosity and promote STEM fields, especially geospatial sciences, which I'm passionate about. I hope to bring an energetic and forward-thinking approach to the board, helping to highlight the intersection of science and real-world applications. I believe this is crucial for inspiring the next generation of innovators and giving back to the St. Louis community.

What role do you see institutions like the Science Center playing to support fields like geospatial science?

Institutions like the Science Center play a crucial role in supporting geospatial work by educating the public and fostering interest in the sciences. By partnering with the geospatial industry, the Science Center can showcase the relevance of this field in everyday life and its potential to shape the future. I see opportunities for collaborative programs that highlight the significance of geospatial science, not only as a career path, but also as a tool for better understanding and addressing regional and global challenges. By engaging students and the broader community, the Science Center can help build a robust pipeline of talent for companies like T-Kartor and ensure that St. Louis continues to be at the forefront of this exciting industry.

"We are deeply grateful for Simon Bailey's dedication to the Saint Louis Science Center and celebrate his impactful contributions as both a Trustee and member of the Einstein Society. With his leadership in the dynamic field of geospatial science, Bailey brings not only expertise but also a passion for inspiring curiosity and innovation. His efforts to connect the Science Center with opportunities in the growing geospatial industry reflect his commitment to education, community engagement and the future of STEM. Through his generosity and vision, Bailey is helping us empower the next generation of thinkers and position St. Louis as a leader in science and technology. We are honored to have him as a partner in our mission to make science accessible and inspiring for all."

– Todd Bastean,
President & CEO, Saint Louis Science Center

Jack Taylor and JoAnn Kindle with early participants in the YES Program.

Thank you to everyone who joined the Crawford Taylor Foundation Matching Gift Challenge!

MORE THAN

$225,000

IN SUPPORT OF OUR CURIOSITY FUND

Resulting in a generous outpouring of more than 1,500 gifts, the Crawford Taylor Foundation Matching Gift Challenge was a resounding success!

With more than **$125,000 raised** and the Crawford Taylor Foundation's generous **$100,000 matching fund gift** in 2023, that amounts to **more than $225,000 in support of our Curiosity Fund**, which makes impactful programs like our signature Youth Exploring Science (YES) Program and so much more possible. We were honored by the collective generosity of both new and returning donors, and the challenge demonstrated that our mission resonates with so many and throughout the St. Louis region.

Thank you to everyone who joined the challenge, and thank you to the **Crawford Taylor Foundation** for their dedicated and generous partnership **to inspire everyone to be curious and engaged in science.**

Inspired to support our work?
Turn to **page 17** to learn more about how you can make an impact and empower the innovators of tomorrow through the mission of the Saint Louis Science Center.

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