newscience

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

WINTER 2023-2024



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Connect with curiosity.

Dear Friends of the Saint Louis Science Center,

As we come to the end of the year, I'd like to take a moment to reflect on 2023 and how grateful we are here at the Science Center to provide our St. Louis community and region accessible, quality STEM education experiences that bring science to life and inspire the curiosity to ask "why?" and look for the answer.

This year, our iconic James S. McDonnell Planetarium celebrated 60 years of inviting our community to discover the past and future of aerospace technology and explore the evolving nature of space science, and our Youth Exploring Science (YES) Program celebrated its 25th anniversary of transforming lives through STEM learning and creating a legacy of success for St. Louis teens by preparing them for success in the STEM careers of tomorrow.

We're proud to continue bringing our St. Louis community closer to STEM in new, fun and exciting ways—all in a place where everyone can wonder and discover together.

In this issue of NewScience, I encourage you to see our Gallery Spotlight on page 10 to learn more about our new Dream It. Build It. exhibit, a free STEM experience where quests can become builders, explore engineering and be inspired by the architectural history around us right here in St. Louis. On page 14, you can learn the surprising backstory of the McDonnell Planetarium's annual holiday bow, with memories and insights from one of the architecture students who helped start the tradition back in 1966.

Turn to page 22 to read about the latest YES Program alumni being commemorated as part of our YES Alumni Wall, honoring the success stories of our YES Teens. Plus, see stories of how our Community Science efforts are bringing STEM education experiences to today's YES Teens, our St. Louis community and more.

Finally, I encourage you to turn to page 31 for information on where to find the Science Center's 2022 Annual Report and our latest Opening Minds to Science report. If you haven't yet seen these publications, I hope you'll take a moment to learn more about the work you as a supporter help make possible and all the people we're able to connect with a curiosity for science thanks to you.

In this season of gratitude, we are thankful for your partnership and support in serving our St. Louis community as we inspire everyone to be curious and engaged in science, and we hope to see you soon at your Saint Louis Science Center.



Happy holidays,

Todd Bastean President and CEO

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

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











Hours

Thursday-Saturday 9:30am-4:30pm Sunday 11:00am-4:30pm Monday 9:30am-4:30pm Closed Tuesdays & Wednesdays

Contact

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

Membership

Services & Sales: 314.289.4491 slsc.org/membership memberships@slsc.org Member Reservations: 314.289.4424

Reservations

Advance Sales & Group Reservations: 314.289.4424

Education

Field trip information: slsc.org/field-trips Educator Resources: slsc.org/educator-resources 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: 314.533.8179

Accessibility

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

Official Partners

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













Holiday Hours

CLOSED

Sunday, December 24 Monday, December 25

OPEN

Tuesday, December 26 | 9:30am-4:30pm Wednesday, December 27 | 9:30am-4:30pm

> Hours are subject to change; please check slsc.org for the most current information.

In This Issue...

Membership Matters

Meet our new Membership Manager, Ashley Turigliatto, and the newest member in the spotlight, Jennifer Wallace. Plus, learn about upcoming member events and more.

Science Today

Learn about the NASA-ISRO Synthetic Aperture Radar Satellite (NISAR mission) from NASA flight technician Jenna Cadwallader.

Gallery Spotlight

Explore our newest interactive exhibit, Dream It. Build It., and learn about engineering and architecture, while engaged in hands-on creating and

Science Never Stops

Join us in honoring our Hospitality Heroes and Hospitality Superhero, Ashley Butler, all of whom work hard to ensure a fabulous guest experience at the Science Center.

Did You Know?

Read an interview with Allen Levin, who, along with his college classmates, first wrapped the Planetarium in a bow back in 1966.

Join Us

Learn about upcoming events, check out the OMNIMAX® schedule and find out the history of LASERIUM, the popular laser shows which began 50 years ago.

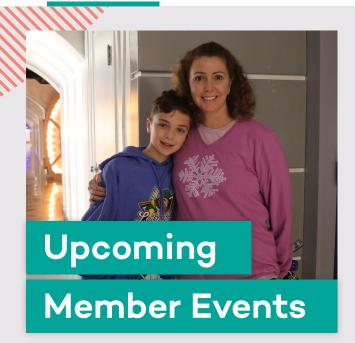
Community

Celebrate 25 years of YES Teens with a newly updated YES Alumni Wall, see what our current YES Teens are doing and find out about upcoming esports programs and events.

Partnership & Support

Look back at our tenth annual golf tournament, read about Pumpkin Blossom Hill in our Donor Spotlight and see what our annual report has to tell us. Join us in thanking our donors in the 60 for 60 Challenge and more.

slsc.org 3 2 WINTER 2023-2024



THURSDAY, DECEMBER 7, 2023 Holiday Member Appreciation Night

Reservations available now.

Our favorite event of the year! Join us for a fun night just for members to explore the entire Science Center. We'll have Star Shows, OMNIMAX® documentaries, fun activities in our gallery spaces, food and shopping specials to help you cross some gifts off your holiday shopping list and so much more.

THURSDAY, JANUARY 11, 2024 OMNIMAX® Member Preview: The Arctic

Reservations available December 21.

Members see it first! Join us for the preview of our newest OMNIMAX® documentary, *The Arctic*, before it opens to the public. Your free member ticket includes popcorn and a beverage.

THURSDAY, FEBRUARY 15, 2024 Member Mission: Dream It. Build It.

Reservations available January 25.

Join our Makerspace educators for an evening of engineering and architecture fun! We'll be building structures out of KEVA planks in our Current Curiosities and learning about some of the greatest buildings in the history of St. Louis architecture.

Our reservation line is available Mondays through Saturdays 9:00am-4:30pm and Sundays 10:30am-4:30pm at 314.289.4424.



Your Member Access Portal

Our Member Access Portal has been available to you, our members, since early April 2023. Since it began, we've been updating it monthly to ensure you have the most current information regarding goings-on at the Science Center, as well as members-only access to content not found anywhere else.

Each month, we featured a new Selected Artifact from our Collections. We've kept the photos from previous member events in one place for easy viewing (and saving your favorites). We've shared at-home science experiments to try. We've refreshed the Announcements section monthly, and added a link to our Instagram feed too.

Some of our most exciting content includes the videos featured on our Science Now! page. Recently we uploaded the video of the private event that took place on Friday, April 14, 2023 at the Planetarium as part of its 60th anniversary. Attendees gathered in the Orthwein Star Bay for a special champagne toast from John McDonnell, whose father, James S. McDonnell, played a pivotal role in ensuring the Planetarium's construction could be completed. Afterward, a panel discussion, moderated by Planetarium Manager Will Snyder, took place with guest speakers including retired McDonnell Aircraft Corporation engineers Dean Purdy and Norman Beckel, as well as Brad Jolliff, Scott Rudolph Professor of Earth and Planetary Sciences and Director of the McDonnell Center for the Space Sciences at Washington University in St. Louis, and Mike Nowak, PhD, Research Professor of Physics at Washington University in St. Louis. They discussed the past, present and future of space science in St. Louis. We are glad to be able to share the fascinating panelists and their historical remembrances with you.

We are hoping to add more useful and engaging content to the Portal in the coming months. What would you like to see in the Member Access Portal? We'd love to hear from you! You can send us a message at any time in the Contact Us section of the Account & Benefits tab.

Member Spotlight:

JENNIFER WALLACE

How long have you been a member?

I have been a member for about two years. I've been trying to get away from material things for holiday gifts and focus on experiences. For a long time, I have been giving a membership to a popular local attraction to my mom for Christmas every year. In 2021, I decided to ask my mom to do the same for me with the Science Center. I chose the Science Center because I feel it includes all the best parts of those fun things to do in St. Louis. Do you like animals? The Science Center has that. Like plants and flowers? The Science Center has that. Like history? The Science Center has that. Like science? Yeah, the Science Center has that, too, of course!

How often do you visit, and what do you like to do here?

My favorite thing to do is to bring my niece and nephew to the Science Center. They are super smart (like their aunt) and curious. When they were younger, they were super into dinosaurs and loved to dig up fossils and such. Now they like the special exhibitions. My mom and stepdad took us all to the *Apollo 11* exhibition and they were mystified by the room set up to look like a typical 1969 living room. My mom told us about watching the moon landing on television. It was a memorable family moment to see them so interested in history through their grandma's eyes.

Tell me a favorite memory of spending time at the Science Center.

Other than the *Apollo 11* exhibition, some of my favorite memories are from school field trips. I remember the Planetarium shows and watching the universe laid out before us. It seemed like magic when I was a child. When the Oakland building opened, I remember going to see the *T. rex* for the first time. It was amazing!



What types of member events do you like best?

I really enjoy going through and interacting with the exhibition by myself or with my people. I especially enjoyed *Becoming Jane* because I noticed that a lot of the signage and information was both in English and Spanish. I teach at a Newcomer Center in St. Louis County, and much of our student population is Spanish speaking. I have learned so much Spanish since I started working there, and it has enriched my life immensely. I love to see places I enjoy being more inclusive.

What's your favorite member benefit?

I love having access to the special events for exhibition previews. I feel like an MVP, and it is just so much nerdy fun!

Why would you recommend becoming a member to anyone considering it?

It gives me such satisfaction to know that I support an important institution in our city. My small contribution is magnified infinitely in value for our community, and it makes me proud to be a St. Louisan.



Know a family who would benefit from a Science Center membership? Consider giving the gift of a full year of fun events and science learning. Give the gift of membership! Visit *slsc.org/membership* to learn more.



CHOUDAY In our gift shops support science learning in the St. Louis area. CIFT GUIDE

Whether it's one big night of gifts, eight nights of celebration, a birthday or just because, you can find something for everyone on your list in our ExploreStore and Planetarium gift shops!

Members always receive 10% off in our gift shops and in our online store using code Members10%MM.

Check out a few ideas here—then make big science dreams a reality for your loved ones this holiday season. And don't forget to include a gift membership—the gift of a full year of science fun and learning for everyone to enjoy!





Space Bamboo Sippy Cup \$18 (\$16.20 for members)



Jupiter Glass Dome Magnet \$10 (\$9 for members)







Your purchases

Space Pops Freeze Dried Ice Creamy Pops \$8 (\$7.20 for members)



DECEMBER 7
Shopping at
Holiday Member
Appreciation Night?
Members can get
20% OFF their
purchases during
the event.



Ginormous Hatchin'
Grow Dino Egg
\$15 (\$13.50 for members)



FOR THE FUTURE DOCTORS: Squishy Human Body Science Kit \$30 (\$27 for members)



FOR THE FUTURE ENGINEERS: KEVA Structures 200 Wood Building Planks Set \$85 (\$76.50 for members)



FOR YOUR SWEETHEART:
I Love You To The Moon
Plush Penguin
\$33 (\$29.70 for members)



FOR THE OUTDOORSY ONES:
Paleontologist Fossil Dig Doll
\$30 (\$27 for members)



FOR THE COFFEE & TEA FANATICS: Lab Glass Mug \$25 (\$22.50 for members)



FOR THE PUNNY DADS:
Atom T-Shirt
\$24 (\$21.60 for members)
*Online only



THE ALWAYS-COLD ONES: T-Rex Skull Hooded Sweatshirt \$48 (\$43.20 for members)



Ashley Turigliatto

Saint Louis Science Center's New Membership Manager

Bringing 17 years of event planning, membership and fundraising experience to our team, Ashley Turigliatto joined the Saint Louis Science Center as Membership Manager in August 2023. She and her team are responsible for ensuring the best possible experience for the Science Center's members, organizing a variety of member events, creating *NewScience* and much more. Turigliatto is a native St. Louisan and a huge fan of all that the Science Center and the ZMD (Zoo Museum District) bring to our community.

"Membership programs are meant to steward and celebrate your most loyal, enthusiastic community supporters—I cannot wait to do that for the Saint Louis Science Center! Whether it's for our newest families or folks who have been members for 20+ years, our team looks forward to bringing you the best experience that we can offer. Be sure to keep an eye out for new, exciting opportunities as we head into 2024!"

Prior to the Science Center, Turigliatto was the Director of Marketing and Sales at City Museum, as well as leading the fundraising efforts of St. Louis nonprofit organizations such as the Pujols Family Foundation and St. Andrew's Resources for Seniors. She also owned and operated her own private event company. At these positions, she spent her career adding value to immersive experiences for the St. Louis community.

Turigliatto earned a degree in English Literature at University of Missouri-St. Louis while also completing a certification in Nonprofit Management and Leadership. Please join us in wishing Ashley a warm welcome and many successful years at the Science Center!



STEM EXPERT SPOTLIGHT



Jenna Cadwallader is a Flight Technician at NASA's Jet Propulsion Laboratory (JPL). By trade she is an aircraft mechanic, but she has worked in other aspects of maintenance, including fabrication, inspection and repair of water slides and roller coasters; fabrication and inspection of satellite and aerospace components; and testing of aerospace equipment. Since the beginning of her career at JPL, she has been fortunate enough to work on the Perseverance Mars Rover, the Earth-based Curiosity Rover twin, and the Earth Surface Mineral Dust Source Investigation Instrument (EMIT) located on the International Space Station. Currently, she is working on the NASA-ISRO Synthetic Aperture Radar Satellite (NISAR) in both India and the United States.

Installing the turret onto Perseverance. This is the same turret featured in many of the images we receive from Mars. This acts as the rover's hands and allows us to pick up samples.

Collaborating **Across Continents**

WITH NASA FLIGHT TECHNICIAN JENNA CADWALLADER

For Jenna Cadwallader, flight technician at NASA's Jet Propulsion Laboratory, there's no such thing as a "typical" day in the aerospace industry. With a wealth of experience across projects in the aerospace and engineering industries, Cadwallader has been involved with a range of projects, from the fabrication, inspection and repair of water slides and roller coasters to satellite and aerospace components.

Today, she's part of a collaboration between NASA and the Indian Space Research Organisation (ISRO) to launch the most advanced radar system ever deployed on a NASA science mission, which will help humans study natural hazards, melting sea ice and more.

We spoke with Cadwallader about her role in the mission, what it's like to collaborate across continents (and time zones) and what inspired her to get involved in a career





Posing with Perseverance's Earth-bound twin rover during a rock core collection campaign.

Can you tell us a little about the NASA-ISRO mission and what your role is?

The NASA-ISRO Synthetic Aperture Radar (NISAR) is a satellite that will use two different radar frequencies (L-band and S-band) to measure changes of our planet's surface, including movements as small as a centimeter, as well as provide information for scientists to better understand the effects and pace of climate change. I am one of this project's mechanical technicians, which allows me to be part of the physical assembly and testing of this satellite.

What's a typical day like for you as part of this mission?

One of the unique things about working in my role in the aerospace industry is that no two days are ever the same. A "typical" day could be anything from assembling and attaching parts of a computer system or setting up a thermal and vacuum test to flying around the world to deliver hardware.

For an international collaboration like this one, what are some of the unique challenges posed by working across continents and what are some ways you overcome those challenges?

Every part of this project has been a learning experience, but there were some learning curves. One major challenge for me has been managing the time difference between continents. A great way to mitigate this barrier has been to maintain clear communication with both coworkers and family members, and to have patience with everyone involved.

What does it mean to you to be involved in a project like this one?

It's such an incredible and humbling feeling to be part of something that is going to benefit humankind. This has given me great pride in my work, my team and our mission. I look forward to seeing all the ways this satellite, as with all of our missions, is able to help people around the world.

What inspired you to get into science as a career?

When I was in tenth grade my high school was offering a field trip to my local airport for an Aviation Career Day. I had no idea what to expect, so I signed up. As soon as I stepped foot on that airfield, I fell in love. That trip, combined with a passion for working with my hands and taking things apart to see how they work, led me to a

What are the top three things you'd want readers to know about your field of science?

Like many other fields of science, aviation and aerospace are the frontlines for so many types of innovation. Being able to see the creation of these innovations is an amazing process, but it also involves a lot of hard work. It might seem glamorous to work on equipment that leaves our planet, but a lot of testing is involved that can be pretty monotonous. If equipment is not perfect on Earth, it won't be perfect in space. Likewise, an aircraft must be in perfect condition for flying to avoid major disasters, and those inspections take time and attention to detail.

Working in clean rooms can be a challenge. "Bunny suits," or the white outfits we wear in clean rooms, are not very comfortable! We also have limitations on makeup, deodorant, and hair shampoo—all to prevent particles, skin oils, hair or unknown chemicals from contaminating critical surfaces of the equipment we are building.

Finally, not everyone who works in aerospace is an engineer. There are so many ways to enter this field (even if you have difficulty with math or engineering classes like me). Life sciences, environmental studies and chemistry are among numerous alternate degrees that are sought after in this field. College is not always necessary—an aircraft maintenance program through a local trade school could land you a job working as a technician on a satellite!

Dream It. Build It. Invites Guests to Find Inspiration in St. Louis' Architectural History and Imagine Building the St. Louis of Tomorrow.

In *Dream It. Build It.*, the Saint Louis Science Center's new exhibit, guests are able to play, experiment and build freestanding structures using KEVA planks—small wooden blocks that, when put together, can create almost any design—and find inspiration in some of St. Louis' notable architecture and history.



We spoke with the Science Center's Sarah Brown, Manager of Makerspace & GameXPloration, to learn more about this exciting new (and free) addition to the Oakland Building's STEM experiences, the local St. Louis aspects of the exhibit, and more about what guests can expect to find inside.

Sarah, can you tell us a bit about *Dream It. Build It.* and what guests can expect inside?

Dream It. Build It. is primarily an interactive exhibit that gives guests the opportunity to build with KEVA planks and Imagination Playground blocks. Guests are invited to build anything they can dream up, but we also have prompts and building ideas throughout the exhibition. The exhibit also features information on St. Louis' spectacular architectural history, as well as information on what architects, engineers, general contractors and others do to complete building projects.

What are some of the STEM concepts the team is most excited to see guests explore in this exhibit?

Building and design are all about physics and how humans can use physics concepts to create structures that do amazing things like reach very tall heights, hold huge amounts of weight or use really cool concepts like cantilevers that suspend buildings or bridges in the air. There's also a design element to the exhibit where guests will have to think and plan before they build.

A lot of the STEM concepts in the exhibition also relate to the careers people can pursue in these design and building fields. We want people to be inspired by St. Louis' architecture and think about how they can be part of creating our future city.

We are excited for people to engage with these concepts freely and create something different each time they visit. I am also personally excited to see the incredible things people create! It's going to be a blast.



Dream It. Build It. just so happens to be located next to the Makerspace, which explores some similar STEM concepts. Is the Education team thinking about the two together? Are there other galleries or experiences at the Science Center you hope guests pair with the exhibit?

Yes, there will be a lot of crossover with the Makerspace next door. The Makerspace team has some fun programs and extra activities developed. We will have some building challenges that pair up Makerspace exhibits with *Dream It. Build It.*, so both will literally build on the content in the other space.

As for other galleries, the Structures gallery on the bridge is really the companion gallery to *Dream It. Build It.* Where *Dream It. Build It.* focuses on design, Structures takes guests more deeply into construction. Both allow a lot of hands-on opportunities to engage with STEM concepts.

At the Science Center, *Dream It. Build It.* includes several examples of local St. Louis architecture (including our iconic McDonnell Planetarium). What do you hope guests take away from seeing those St. Louis elements?

We really wanted people to be able to see examples of the engineering and design feats we talk about in this exhibit in their own community. By telling a little of the history and some important examples, we hope people will look at St. Louis in a new light and know a little more about the amazing structures in our city, as well as shed light on some lesser-known stories of building and design.

Why was it important to bring an exhibit like *Dream It. Build It.* to the Science Center?

Engineering is a core content focus at the Science Center and, in particular, the way engineers, architects and others work together to creatively solve problems. And we believe it is vital for our community to be able to experience hands-on, interactive environments where they can learn by *doing*.

It's so important for people of all ages to attempt something, maybe fail at first, and then revise their original design and succeed. Those are skills that are valuable for all areas of life and across so many careers.









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Hospitality Heroes Honored

At this year's Explore St. Louis Annual Meeting and Hospitality Hero Recognition, nine staff members from the Saint Louis Science Center were honored for consistently providing high quality customer service, including one, Ashley Butler, who was named a Hospitality Superhero for rising to an unexpected occasion, pulling out all the stops and making sure the guests' experience was a positive and memorable one. Ashley was featured in a video in which the following scenario was charmingly reenacted, complete with Superhero Ashley in a flowing cape. Here's what Explore St. Louis had to say about our Superhero:

ASHLEY BUTLER, SAINT LOUIS SCIENCE CENTER

Ashley is empathetic, and she can anticipate issues. When a family of four arrived at the Saint Louis Science Center, Ashley immediately noticed that they were flustered. When she greeted them and asked how their day was going, Ashley learned that they were going to be late for another attraction, they had planned an activity that was not kid friendly, and they didn't know what they were doing for dinner. So, she seated them in the OMNIMAX® Theater, exchanged their tickets to the other attraction, organized three new kid-friendly activity options, got them a parking discount and suggested family-friendly restaurants that were affordable and near their hotel. She made herself their personal concierge!

Other staffers honored at the luncheon included Ruth Birch, Christina Carlson, Neville Crenshaw, Maddie Earnest, Paige Espe, Bridjett Holliday, Noni Holstrom and Michelle McGruder. Our thanks and congratulations go out to these honorees and to our Superhero, Ashley, for making our guests' experiences at the Science Center as enjoyable as possible.

The Bow's

Origin Story



1966 Original Planetarium Bow!



Santa and helper Jan Signaigo make sure the bow is secure. ca. 1970s.

Courtesy of Shannon Werner



Planetarium with green bow for the holidays, ca. 1970s.





ALLEN LEVIN

In front of the James S. McDonnell Planetarium 57 years later.

1980

Planetarium with yellow ribbon, ca. 1980

During the Iran hostage crisis, staff tied a yellow ribbon around the Planetarium.

Everyone in St. Louis recognizes the Planetarium bow. We've been seeing the iconic decoration tied around our beloved James S. McDonnell Planetarium every holiday season for over fifty years. But not just anyone can tell us the story of how this tradition began, so we were lucky to spend an afternoon reminiscing with Allen Levin, who was part of the group of Washington University architecture students who came up with the idea and first made it happen.

Levin explained that the Planetarium was completed in 1963sixty years ago - which was the same year he entered Washington University's architecture program. "The School of Architecture was undergoing a transformation into a modernist school [from its previous existence as a Beaux Arts-focused program] under its new dean, Joseph Passineau. There was a sense among students that we were riding a wave. And we all worked together in large studio halls.'

It was this organized camaraderie that led to the birth of the bow idea. Levin went on, "So in our third year, 1966, it was common for many of us to hang out together. I believe it was during those times that someone suggested putting a ribbon on the waist of the Planetarium"

While this isn't Levin's first interview on the subject, we discussed the fact that most of the previous published versions of this story presented the original Planetarium bow plan as a prank, but Levin insists that he and his cohort didn't think of it that way.

"We loved the simplicity of its design and how it related to the Arch. It would not be a prank-but more like a celebration."

To these students, the bow emphasized what a gift the Planetarium - its design and its contents, too - was to the city of St. Louis.

Once the idea had been established, these young architects in training got started on making the idea a reality. "It was simple to get the architectural plans to determine the circumference of the ribbon. I think it was about two feet wide. The bow was maybe 15 or 20 feet across, reinforced by plywood strips. The ribbon was attached on its upper edge with a cable to pull it around the neck of the paraboloid. We determined the roof could be reached by ladders." Perhaps the reason for the repeated depictions of this event as a prank is due to the fact that these students didn't ask anyone's permission; instead, they took it upon themselves to surprise commuters the next morning.

But back to the planning: "Some of us visited the building several times and determined that at night the guard, just one, was locked inside. As long as we avoided walking by the entrance, he would not know what was going on."

Levin went on: "So the plan was to load everything in some vans after midnight. It all had been assembled at the school. There were fewer than a dozen of us. We drove down Oakland to a pedestrian bridge that was originally located where the present Science Center bridgeway is and carried everything by hand across, and then up the hill, to the building." With the planning stages executed, there was only one thing left: to sneak onto the Planetarium grounds and install the ribbon and bow.

"I believe we put it up about a week or so before Christmas," Levin explained. "That night we were very fortunate that a heavy mist clouded the area. Few cars on the road. We walked auickly and drew no attention. We had two or three extension ladders that were leaned up against the roof. Then three [of us], maybe more, climbed onto the roof. The first thing we realized was that the pitch of the roof got steep very quickly and we'd have to shimmy up backwards on our butts. The surface was quite rough, so there was no fear of sliding down." (Note: we do not recommend attempting this! Please stay off the surface of our Planetarium.)

"We pulled the ribbon around first, and that took some time. It immediately got tangled, so that was a struggle to straighten out. Then the bow was hoisted up and fastened." Success!

The ribbon and bow having been placed, it was now time for the college students to make their great escape. "We slid down, gathered up the ladders and tools and went down the hill to the bridge. Some of the last of us were spotted by the guard, who was puzzled by what we were doing. I believe he may have been responsible for calling the police. We got away, but some of us drove into the park later, just to catch a glimpse of it."

1988

Planetarium with black-tie bow for the 25th anniversary.



2013

Planetarium with a gold bow for the 50th anniversary.



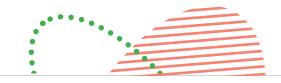
TODAY



It seems unbelievable, especially with the police having been called, that the students got away with this trespassing surpriseespecially since they identified themselves by leaving a note. Back at the school, they also called KMOX and filled them in, ensuring word would get out. And not only did they get away with it, but they were praised and even asked to continue the tradition.

"The next day, it was the talk of the town," Levin said. "Everyone loved it. The following fall, the Planetarium called the school to see if we would do it again, but once was fun enough. And the ribbon that goes up each year is frankly much nicer and more

When asked if the architecture students could have ever guessed the way their little surprise would change holidays in St. Louis forever, Levin responded, "We never guessed this would become a tradition."



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LASERIUM Turns 50

Have you ever attended a laser show at the McDonnell Planetarium? They all got their start 50 years ago with the premiere of LASERIUM—The Original Laser Light Concert.

LASERIUM was the brainchild of experimental filmmaker Ivan Dryer and partner Charlie McDanald, who joined with Caltech physicist Dr. Elsa Garmire to bring new laser technology out of the laboratory and create an otherworldly form of entertainment. LASERIUM featured hypnotizing laser effects in what were then the brightest and purest colors ever seen set to music ranging from classical, like the Blue Danube Waltz, to contemporary rock from Emerson, Lake & Palmer.

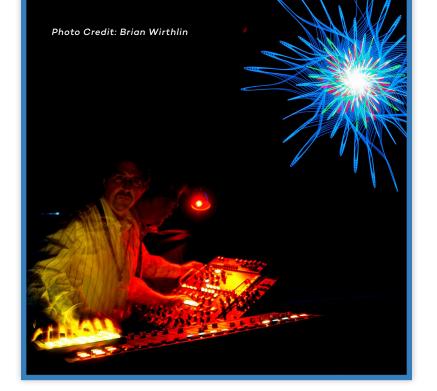
The first LASERIUM performance took place on November 19, 1973 in Los Angeles' Griffith Observatory's planetarium and would go on to become a worldwide phenomenon. The summer of 1975 saw the first LASERIUM shows in St. Louis when the McDonnell Planetarium became only the fifth planetarium in the world to host live laser music performances.

LASERIUM shows were performed live by a team of laserists who added their own passion and creativity to each laser concert, ensuring that no two performances were exactly alike. Brian Wirthlin was one of the original laserists at the McDonnell Planetarium and was able to share some of his memories with us.

Q: Tell us about yourself and how you became a laserist at the Planetarium.

A: I took an astronomy class taught by Pudge Landau as a high school freshman in 1973. One evening she stepped out of class for a short time to become the President of the Friends of the McDonnell Planetarium organization. The Friends ran the [Planetarium's] Bookstore, and Pudge put two of her high school students to work. In 1976, I was hired by the City of St. Louis as an auditorium attendant. The auditorium attendants acted as ushers, ticket sellers/takers, watched the gallery, acted as human automation systems for the Star Shows and ran the stars for LASERIUM.

In 1978, I became chief technician of the McDonnell Planetarium, and shortly after that was hired as a main laserist by Laser Images, Inc., when a trainee laserist decided he wasn't ready after three months of training. At that point I'd seen three years of LASERIUM shows, and stayed late to help out troubleshooting the laser projector when there were problems. When the main laserist in St. Louis (Steve McGrath) was asked, "Do you know anybody who can become a laserist in a week?" He said, "Brian can." He hired me on the spot and approved my performance three days later.



Q: How did people react to the first LASERIUM shows in St. Louis? What do you think made them so popular?

A: I'd seen the Planetarium crowded every once in a while before LASERIUM. If a weekend day started out clear and then it started to rain, a small percentage of the people at the Zoo would simply inundate the Planetarium. LASERIUM was a whole different level of success. Wednesday through Sunday, three shows a night sold out for months. The original LASERIUM show ran for 92 weeks and still sold out the 9:00 and 10:30 shows on the weekends. There were people who came back week after week.

As for LASERIUM's success, it was a different time. FM radio was taking off, but the cost to advertise wasn't prohibitive. There wasn't remotely as much competition for your free time as today, nor competition for your attention. The number of ads we're exposed to today is crazy.

LASERIUM was different. It was indescribable. LASERIUM hit on an ad strategy that worked. They interviewed people coming out of the show and recorded their thoughts. Then they cut some of those recordings together as ads. Nobody listening had the slightest idea what those people were talking about, but they wanted to find out. The original LASERIUM was abstract. There were no lyrics. There were no cartoons. Just beautiful interference effects and geometric scanned images choreographed to the music live in the most vibrant colors imaginable.

Q: What was your favorite part of performing LASERIUM?

A: Learning to be a laserist was hard. The control system was complex and [grew more complex]. The laserist's job was to choreograph abstract and geometric imagery to the music in real time. To dance with light. I enjoyed making the shows my own, finding the right stuff to keep the audience engaged. When I started doing LASERIUM, I had notes that I would flip through number by number. Fairly quickly, I didn't need the notes. Eventually it was motor memory, and even when something broke, I was in the zone and could anticipate where that problem would crop up later in the show and how to work around it. Sometimes the workarounds became part of the show. It let me [unleash] my inner perfectionist. It was fun!

Q: Do you have a favorite story or anecdote from when LASERIUM was at the Planetarium?

A: Glenn Thomas was the main laserist in L.A. He was in St. Louis way back when to teach Steve McGrath [and me] how to perform LASERIUM Starship. One night after the regular shows we did the modifications to do Starship. I remember thinking when the first images hit the dome, "This is going to be fun."

The next night I arrived after the first performance of LASERIUM Lightyears. Glenn said, "Get your notebook. I'm going to do the next show — it's totally different than Steve's show." (I'd been taking notes the night before watching his performances of Starship.) I replied, "Glenn, I'm learning Starship, but I already know Lightyears. If you do something I like I'll steal it, but I won't need to take notes."

He did a great show, and I should have taken notes. I told Steve, "You know, I have to do the 10:30 show..." He smiled and said, "I thought you'd say that." The show went well and I incorporated a few things stolen from Glenn. Glenn said afterwards, "Your show started out a lot like Steve's, but then you sailed right off on your own." Glenn was a masterful laserist. His style tended to be very smooth and subtle. Lightyears was a rock show, so smooth and subtle wasn't the only way to dance.

Over the past 50 years, LASERIUM gained a place in people's hearts and popular culture by being performed in over 46 cities worldwide, featured in countless pop music concerts and music videos, as well as being used to create special effects in movies and television shows, including two *Star Trek* films.



The legacy of LASERIUM continues today at the McDonnell Planetarium through our Laser Light Show Series. For more information about our current laser shows, visit **slsc.org/lasers**.

WINTER ASTRONOMY DATES

DECEMBER 13-14 | Geminid Meteor Shower Peak

The annual Geminid meteor shower will peak the night of December 13-14. 2023 is posed to be an an excellent year to view the shower, with a nearly new moon providing dark skies for most of the night. Best viewing will be from a dark location after midnight where up to 120 meteors per hour may be visible during the peak.

DECEMBER 21 | Winter Solstice

The winter solstice occurs when the Sun reaches its lowest position in the sky at local noon and marks the start of astronomical winter in the Northern Hemisphere. On this day, the sun will rise at 7:12am CST and set at 4:42pm CST, providing only 9.5 hours of sunlight in St. Louis.

FEBRUARY 10, 2024 | Lunar New Year

Millions of people around the world will celebrate the start of a new lunisolar year on February 10. Lunar New Year usually occurs on the second new moon following the winter solstice (in St. Louis, the new moon will fall on February 9 due to time zones). In the Chinese Zodiac, this begins the year of the dragon.

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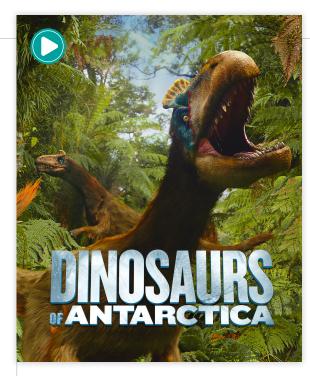


The Arctic | OPENS JANUARY 12

Imagine a place that is vast, wild and untouched, where some of the world's greatest wildlife spectacles unfold. The Arctic National Wildlife Refuge, situated in the northeastern corner of Alaska, is the wildest place left in North America. A symbol of wilderness for the world. No one has truly ever seen it. The Arctic: Our Last Great Wilderness will feature the first-ever cinematic account of this little-known land where people can experience a world untouched by time.



Deep Sky brings the awe-inspiring images captured by NASA's James Webb Space Telescope (JWST) to IMAX®-taking audiences on a journey to the beginning of time and space, to never-before-seen cosmic landscapes, and to recently discovered exoplanets, planets around other stars. Deep Sky follows the high-stakes global mission to build he JWST and to launch it into orbit one million miles from Earth, in an attempt to answer questions that have haunted us since the beginning of time: Where did we come from? How did the universe begin? Are we alone?



Dinosaurs of Antarctica CLOSES JANUARY 11

Journey to the south polar landscapes of Antarctica hundreds of millions of years ago. Join Antarctic scientists on a quest to understand the ice continent's profound transformation and predict the future as humans drive dramatic change.



Ocean Odyssey | CLOSES JANUARY 11

Five hundred million years ago, life left this blue womb and colonized the land, but we are still intricately linked to the ocean. Our climates, coastlines, ecosystems, and economies are tied to the perpetual movement of water between continents. The great ocean currents are the arteries and veins of Planet Earth. This is the story of one particularly fascinating flow-the East Australian Current, a massive oceanic river that stretches the length of Australia's east coast.



ECLIPSE

Are you ready to get eclipsed?

Explore the nature of eclipses and get prepared to safely observe the upcoming solar eclipse in April 2024. The eclipse on April 8, 2024 will be the last total solar eclipse visible in the United States until 2045. Learn what to expect from these awe-inspiring events and make sure you can safely get eclipsed! Each ticket includes a pair of solar glasses for safe solar viewing.

The Constellations

Constellations are your map to the night sky. These patterns have been passed down from culture to culture and help us locate objects of interest in astronomy while providing us a way to travel back in time to explore the people who gazed upon these same stars before us. Explore the patterns that change overhead throughout the year in this live Star Show.

The Sky Tonight

Relax under the clearest night sky in St. Louis as our skilled presenters lead you on a tour of the best the night has to offer. This live show is different every time, so stop back again to discover the changing stars, planets and other celestial events visible from your own backyard.

The Little Star that Could

A tradition in St. Louis for over 30 years! Developed for our youngest stargazers, The Little Star that Could shares the timeless story of an "average" star in search of what makes him special. Along his journey, we will discover the differences between stars, planets, and galaxies in the night sky.



All First Friday events will take place from 5:00pm-9:00pm. Visit slsc.org/first-fridays for updates and schedules.

DECEMBER 1, 2023 | 60 Years of Doctor Who

Celebrate 60 Years of Doctor Who with us! See the only screen-used, full-scale TARDIS available for public viewing in North America in our Doctor Who exhibit and catch a featured episode. Test your knowledge with trivia, learn about time travel and alien life, play a building-wide game and more!

JANUARY 2024 | NO FIRST FRIDAY

FEBRUARY 2, 2024 | Classic Sci-Fi

Join us for a night filled with your favorite science fiction classics! Try your hand at practical effects used in filmmaking, dive into the science behind some classic films, compete in the ultimate sci-fi movie trivia competition, and come dressed as your favorite sci-fi character. Keep an eye on our social media platforms to help us choose the movies we screen that evening.



SATURDAY, FEBRUARY 24, 2024 | 9:30AM-4:30PM

SciFest: Engineering Expo

Celebrate Engineers Week 2024 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. Find inspiration for applying your own creative abilities, and maybe even discover a new hobby or career path while

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

Two New Murals from the YES Media Arts Component Inspire Today's (and Tomorrow's) YES Teens

This summer, teens in the Youth Exploring Science (YES) Program's Media Arts component installed two 4' x 8' murals at the Taylor Community Science Resource Center. As part of the projects, the YES Teens collaborated to enhance the space, inspire their fellow (and future) teens in the YES Program, and use technology and teamwork to see the projects through, from conceptualizing to installation.

"To create the murals, the teens first had to come up with a sketch of their design," says Jasmine Krueger, manager of the YES Program's Media Arts component. "To do so, they used iPads and Apple Pencils, as well as Adobe Fresco, an industry-standard design software commonly used by designers and illustrators worldwide. Once their ideas were sketched, the teens then pitched their idea to me, and we critiqued and discussed. Then, once the idea was approved, the teens had to spray paint the board for each mural, scale up and transfer each drawing, do the actual painting and, of course, make some revisions along the way."

The "Tomorrow I Will Be" mural is displayed in the hallway inside the Taylor Building. In it, the two figures climbing a set of stairs represent the YES Teens. The teen at the bottom of the stairs is wearing a gray uniform shirt, while the older teen higher up the stairs is wearing a blue Science Center uniform shirt. "Getting their blue shirt is a very big deal for the teens," explains Krueger. "It's something they really look forward to as they go through the program." Around the mural, index cards share thoughts and reflections from the teens on where they want to be in the future, and new teens and visitors to the Taylor Building are able to contribute as well.

The YES Teens created a second mural for the Integrative Medicine & Well-Being (IMWB) component classroom with the prompt of creating a painting that showcased both physical and mental well-being.

"The teens chose to depict a skull," says Krueger, "with one side anatomically accurate, and the other made with plants and organic materials. The plants were chosen to symbolize growth and mental health." As part of the project, the teens also researched and chose quotes to write about the painting that focused on physical and mental health. The teens also left space for others to contribute to the mural. That way, new YES Teens entering the IMWB component can write quotes of their own, and the mural can grow with the program and those in it.

Creating the murals was a collaborative group effort for the Media Arts component, including YES Teens Caleb Tillis, Zay Mathews, Amirra Burks, Harmony Cooper, Kayden Ramsay-Alexander, and Zionna Anderson. While everyone worked on the painting, YES Teen Zionna created the original designs, while Caleb and Zay handled the majority of the drawing. To translate the digital designs to the larger canvas, the teens had to divide each painting into sections to avoid overlapping or smearing their work. The teens divided roles based on their strengths and abilities; for example, some of the teens opted to handle line art and more intricate parts, whereas other teens felt more comfortable painting the background.

"My favorite part," says Krueger, "was watching the teens work together and get messy. Since we typically focus on photography it was nice to spend time this summer getting covered in paint."







YOUTH EXPLORING SCIENCE

At the YES College and Career Fair, YES Teens Learn About the Opportunities of the Future

Approximately 20 local organizations, colleges, and businesses converged on the Taylor Community Science Resource Center on Saturday, October 21, to participate in the 2023 YES College and Career Fair, helping to connect the teens in the Youth Exploring Science Program with education and career opportunities. With attendees stationed at tables throughout the Taylor Building, the YES Teens spent the morning going table to table, visiting with a variety of organizations.

The teens had the chance to meet with colleges like Southern Illinois University Edwardsville, St. Louis Community College Center for Plant & Life Sciences, Fontbonne University and more, as well as learn about career and internship opportunities from Purina, the Humane Society of Missouri, Boeing and even the St. Louis Cardinals. Attendees like the U.S. Navy and the U.S. Coast Guard also gave the YES Teens information on military service and career options. As the YES Program celebrates 25 years of transforming lives through STEM learning, the College and Career Fair continues to serve as one of the ways teens are exposed to the opportunities available after they complete the four-year program and graduate high school.

Amiee More, manager of the YES Program's Integrative Medicine and Well-Being component, headed up this year's event. "The College and Career Fair provides an opportunity for our YES Teens to meet a range of professionals," she explained. "Teens explore different educational and career paths through conversations and engagement with our guests through hands-on activities or tools that are presented."

"The connections our guests and teens make inspire educational decisions, internships and future careers," More continued. "I'm thankful to our guests for sharing their career paths and for providing important information for our teens."

Help support the YES Program with a financial gift to our Curiosity Fund at *slsc.org/donate*.







SATURDAY, JANUARY 13, 2024 | 10:00AM-4:00PM

Join us for the Community STEM Showcase

FREE event!

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/.

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A LEGACY OF SUCCESS

Fresh Faces on the YES Program's Alumni Wall Demonstrate a Lasting Impact

This year, the Science Center's Youth Exploring Science (YES) Program is celebrating 25 years of impact. The YES Program has created a legacy of success by working with teens from underserved communities in the St. Louis area throughout their high school years to help prepare them for the in-demand STEM careers of the future.

At a special 25th anniversary celebration at the Taylor Community Science Resource Center in November, the program celebrated the addition of 14 YES Program graduates to our Alumni Wall, demonstrating the accomplishments of these former YES Teens and the YES Program's continuing impact.



SHANAE WILLIAMS **Entrepreneur & Medical Health Representative**

Go Forth Travels/Elevance Health

The YES Program helped me to develop leadership and teamwork skills.

Having the opportunity to teach kids while at the same time learning new things was one of the many things I looked forward to in the YES Program. During my years as a student, I helped build several types of growing environments for plants throughout the city of St. Louis. After I graduated, I had the chance to return as a program leader. Being able to pour into the generations after me was such a rewarding feeling. Class of 2007



AMANI LEWIS Marine Conservation Scientist

St. Louis Community College Center for Plant and Life Sciences

The YES Program taught me career readiness skills, such as teaching me how to prepare for a job interview, how to network, how to collaborate with people from different backgrounds, and what it takes to be employable.

The experience in the AgriScience Component lead me to want to be the conservationist that I am today. Class of 2016



LESLIE RAMEY

of college. Class of 2015

KATIA LIMA-LOPEZ

college preparation.

Paylocity

Senior Software Engineer

The YES Program was crucial in my

The Tech Component introduced me to software

programming, shaping my decision to major in

Computer Science and pursue a career in tech.

within WashU's Network and Infrastructure

department just before my junior year

The program's support didn't end post high school.

Instead, it opened doors to an internship opportunity

Compliance Operations Analyst

The YES Program has instilled many qualities into me that carried with me into college and

I am forever grateful for the experiences, the internships, and the interactions that were made while in the YES Program. In addition to creating lasting memories, we also created lasting bonds.





STEPHON REDUS **Entrepreneur & Director of I.T.** High Value Tech LLC/BeLeaf Medical

The YES Program was my sanctuary during tough times.

The program not only ignited my passion for engineering, but it also helped me to understand the value of community service. The program helped me to foster personal and professional growth amidst life challenges. Class of 2007



DOMINIC JARRETT Retail Sales Manager

Telemecanique Sensors

The YES Program taught me the importance of hard work, strong work ethic, and how to communicate with a diverse range of people.

It gave me the foundation to explore every opportunity and know that the sky is not the limit. Class of 2007



MAYA MCGREGORY **Marketing Consultant**

M^3 Marketing

YES is a program that truly helps students reach their full potential.

The job readiness skills that I learned through YES set me up for success in college and my career. YES also gave me a community of supporters that I can always count on. Class of 2019



TAMESHA WALLACE Non-Profit Resource Manager Love the Lou

This program was my foundation to become a leader because I learned how to be professional, communicate, and work with other people.

My educators gave me the confidence to be myself and also inspired me to be a leader. Class of 2016



JACORA GARRY **Project Coordinator**

WebTPA

The YES Program has been such a great apparatus that gave me the opportunity to experience a variety of things.

I learned how to conduct myself properly in a workenvironment through the various work ethic workshops. Those values instilled accountability into my life. Also, I got the opportunity to fly a small plane because of the YES program. Class of 2013



MEHYAISHA JONES **Technical Account Manager**

The YES Program exposed me to the world of STEM at a young age, it was extremely impactful on all of my career decisions.

Watching the children get excited about the different science experiments also pushed me to learn more about the field. The YES Program afforded me the opportunity to go to college early, majoring in Computer Science. Class of 2010







VINCENT HATHAWAY

Dentist & CEO

Soul Smiles

The YES Program provided a positive and supportive environment that helped me to pursue my dreams.

The educational and financial resources made available to me gave me access to opportunities that allowed me to focus on my future. Being a Yes teen taught me the importance of community outreach and the benefit of giving back. Class of 2001



OCHANYA MCROBERTS
Clinical Administrator of Inclusion

STEPS Center for Excellence in Autism

The YES Program was a remarkable opportunity that shaped me into the professional that I am today.

It allowed me to cultivate an innovative approach to establishing inclusion classroom programs. The YES Program helped me discover my passion for helping others grow and succeed. *Class of 2001*



DAJAE WILLIAMS

Rocket Scientist/Professional Speaker NASA/ListenUp! Education

The YES program made STEM more accessible to me. Each summer my curiosity and knowledge of science grew.

I went on to become a NASA Rocket Scientist and eventually a full-time professional speaker and science communicator from this program.

Class of 2012



A Life Celebrated

AVIS RIDDLE

April 1, 1998-June 9, 2020

I once graced these halls, but I now exist where there is "no time or space." My spirit is the thread that continues to connect us all and will forever vibrate and live. Breathe life into me... Say my name out loud.

The YES Program was my second home. I made valuable connections, and it equipped me with the skills necessary to excel in college and life. *Class of 2016*





Register Now for the

Winter ROAR Team

If you are between the ages of 9 and 13 and enjoy playing Super Smash Bros., Rocket League, Fortnite, or Mario Kart competitively, then this team is for you! Our ROAR team will play against gamers from local and national YMCA partners. Participants will be provided with in-person esports education and practice on Mondays each week. All competitions will take place virtually on Tuesdays through Fridays from home once a week. Science Center staff will be onsite and available for troubleshooting during competition days. Competitors must have their own equipment, a reliable internet connection and updated versions of the games.

In-person cost is \$99 for non-members and \$75 for members. The cost for virtual participants is \$69 for non-members and \$45 for members. The program begins mid-January and runs for 8 weeks. To register or learn more about ROAR, visit slsc.org/esports.



Snowball Smash-Out

Returns December 30

The Saint Louis Science Center is proud to host one of the largest Super Smash Bros. events in St. Louis this December 30th. In its second year hosting this regional event, the Science Center is poised to welcome over 100 gamers from across the Midwest. Gamers will compete throughout the day for a chance to be streamed in the top eight competitors and a chance at a significant prize pool.

This event isn't just about gaming, though, as participants are encouraged to dress to impress in an effort to be named Best Dressed. Additionally, the event allows members of the community to jump on our stream and practice their casting skills.

Gamers interested in competing can check out the events page at *slsc.org/esports* for more information. Those interested in spectating the event are welcome to hang out and view this one-of-a-kind event!



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SUPPORT THE **WHY BEHIND THE WONDER**

Support accessible STEM education that illuminates the WHY behind the WONDER. Generous philanthropic gifts to the Science Center's Curiosity Fund beyond your annual membership support help power STEM education experiences that provide guests and St. Louis community members opportunities to explore the WHY behind what they're curious about.

Show your support for our mission TO INSPIRE **EVERYONE TO BE CURIOUS AND ENGAGED IN SCIENCE** and help us continue to deliver accessible STEM exhibits like Dream It. Build It., star shows like ECLIPSE, programs like our Youth Exploring Science (YES) Program and more with a gift to the Curiosity Fund today.

Support the WHY behind the wonder with a gift to the Curiosity Fund at slsc.org/donate or with the QR code, or upgrade your membership to a Supporting Membership to increase your impact on STEM education. Learn more at slsc.org/supporting-memberships.





Host your next event at the Saint Louis Science Center

With six unique and flexible venues to choose from, the Science Center can accommodate anywhere from 10 to 2,000 guests.

Our fresh, modern approach to cuisine, décor and entertainment will be sure to thrill everyone on your quest list.



See available event spaces at sisc.org/events.

Email us at events@slsc.org or give us a call at 314.286.4654.









Farming goes back to our grandparents, Herb and Dolly (Christina) Schuetz. They moved [to Illinois] from Missouri in 1962. Herb came with determination and a wife and two daughters, and he began buying farm ground and planting fields. He was a natural. Later, his daughter and son-in-law, Diana and Doc, joined in, and eventually his grandson, Jeff.

As we grew older, our parents wanted to instill values and a work ethic in us like they had. What better way to do this than starting a pumpkin patch? What started out as just a small field has turned into about 30 acres of pumpkins raised each fall season on our farm, Pumpkin Blossom Hill.

What are some ways science and technology play a role on your farm and help you raise your pumpkins?

When the pumpkin patch first started, we found ourselves sitting on an old two-row, horse-drawn Black Hawk planter, dropping pumpkin seeds by hand at the end of June. With the improvement of technology, we can get the pumpkins planted quicker using a larger planter and enjoy the comfort of the air-conditioned tractor cab. We use weed management to control the overbearing weeds and pest management to help ward off insects that enjoy eating our pumpkin plants. Jeff manages all the spraying with his knowledge of chemicals.

We have had 25 years of experience and technology, and these have allowed us to plant the best seeds with high-tech equipment. We also have a Facebook page and website for advertisement purposes for the farm!

Why do you feel it's important that the Illinois Farm Bureau support the Science Center's STEM education programs?

The Illinois Farm Bureau is very involved with our large community of farmers. The more learning opportunities that become available, the more knowledge and awareness is brought in for all. STEM offers outstanding [opportunities] for kids. They are our future, and the more information they absorb, the smarter and more improved technology becomes in the STEM and farming community.

We love the idea of something we grew sitting on someone's doorstep, being admired by passing neighbors. We realize it's important for our community to know where our crops and food come from. Kids at the Science Center can experience this firsthand in the GROW gallery. Much like the Science Center, we encourage all our customers to bring their families. We love to see the joy on their faces as they bring their children and grandchildren to our farm, all while having the opportunity to learn where their food comes from and the dedication it takes to raise it.

Learn more about Pumpkin Blossom Hill at pumpkinblossomhill.com.



Congratulations to the Canonball Agency team for coming in first place.

10th Annual Golf Tournament Benefits STEM Programs



In-kind Sponsor ADgraphix Team



Members of the CASE IH Team

On October 5, the Science Center held its 10th annual golf tournament raising over \$64,000 to benefit STEM education at the Norman K. Probstein Golf Course in Forest Park.

A rainy morning ended up being a beautiful fall day and played host to 100 golfers who participated in skills competitions and even tried to get a hole in one and win a car, courtesy of Frank Leta Automotive!

This year's tournament raffle featured over 30 prize packages including a wine barrel, sports and theater tickets, memberships from organizations all across St. Louis and more!

Congratulations to all the skills contest winners and special congratulations to tournament winners the Cannonball Agency, second place winners from Controlled Products Systems Group and third place winners the Boldt Brothers Building Maintenance team.



Chairman Dan Ladenberger with Science Center Sponsorship and Promotions Manager Christine Cox



Science Center staff (I-r) Michael Wense, Elly Walsh-Rock, Mike Harris and Kerry Stevison

STEM Sponsors

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MATH

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Thank you to our In-Kind Sponsors:

4 Hands Brewery

ADgraphix

Amp Up Action Park Breakthru Beverage Group

Build-A-Bear Workshop

Cannonball Agency

CASE IH

City Museum

Cooper's Hawk Winery & Restaurant

Dewey's Pizza

Forest Park Forever

Frank Leta Automotive

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Missouri Wines

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Saint Louis Zoo

Series Six Co. Shapiro Metals

SSA Group

St. Louis Aquarium at Union Station

St. Louis Blues

St. Louis Cardinals

St. Louis Symphony Orchestra

Summit Distributing

The Fabulous Fox

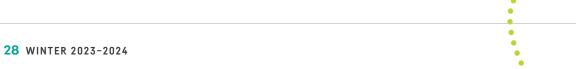
The Magic House

The Muny

Total Wine - Brentwood

Trader Joe's - Brentwood

Urban Chestnut





Thank You for Celebrating 60 Years of STEM Education through the 60 for 60 Challenge!

Thank you to everyone who has supported the Science Center's mission to inspire everyone to be curious and engaged in science through the 60 for 60 Challenge. Earlier this year, the iconic James S. McDonnell Planetarium celebrated its 60th anniversary, and we'd like to thank everyone who has donated to the Science Center's Curiosity Fund in honor of this significant milestone. Because of supporters like you, the Science Center continues to serve as a resource for open, accessible STEM learning experiences that connect our community with curiosity. Here's to 60 more years and beyond!

We would also like to thank the McDonnell family for their loyal partnership and support in inspiring a curiosity for STEM. Their generous 60 for 60 Challenge matching gift and support from the community in April and May have helped us raise over \$155,000 for our Curiosity Fund.

McDonnell Family 60 for 60 Challenge Participants

Anniversary Level (\$10,000+)

Kelly and Mark Bulanda

James and Elizabeth McDonnell

John and Anne McDonnell

Peggy and Andy Newman

Judith A. Toombs

Apollo Level (\$5.000-\$9.999)

Jeanne and John Champer

Amy and Pat Galvin

Alicia McDonnell

Jeffrey and Jennifer McDonnell

Katherine McDonnell and Antonio Pipoli

Catherine and Christopher Rogers

Kerith and Frank Thurman, Jr.

Gemini Level (\$2.500-\$4.999)

Kim and Todd Bastean

Holly and Will James

Gargy and Pratyush Kumar

Kathy and Jim Sherby

Marcella and Greg Stevens

Rachel Presti and Jeremy Williams

Mark S. Wrighton and Risa Zwerling-Wrighton

Anonymous

Mercury Level (\$1,000-\$2,499)

Ted and Robbie Beaty

Bverly RV

Barry Cervantes

Jane and Jim Curran

Dick Fleming and Sarah Smith

Susan and Howard Elliott

Bradley Hornburg

Margaret and Martin Israel

Carol B. Loeb

Lee Metcalf

Richard G. Robb

Mary and Zsolt Rumy

Michael Schulz

Seiler Instrument and Manufacturing Company

Judy Sindecuse

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