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ASTC ANNUAL CONFERENCE, EXHIBIT HALL, FROM SATURDAY, OCTOBER 21 TO SUNDAY, OCTOBER 22

Our events at #Booth1223:

There’s always something happening at our booth! Say hello and pick up a free notebook, exclusively designed for us by American cult brand Field Notes.

Get your best ASTC souvenir ever: Your name as artwork painted by a graffiti artist (yes, for free!)

Take a selfie with Spider-Man. Join us for book signings and round table discussions.

Get your caffeine kick at our Coffee Break or get a bit tipsy at our Happy Hour.

Full program at: sc-exhibitions.com/booth1223 and Facebook, Twitter and Instagram #booth1223

Our touring exhibitions at #Booth1223:

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sc-exhibitions.com/magic

New exhibition!

A unique display of renowned artifacts, spectacular art, and immersive and interactive exhibits, combining the art and history that form the tapestry of Marvel’s enduring fictional universe. World premiere April 2018 at the Museum of Pop Culture, Seattle. Currently booking 2019, the year of Marvel’s 80th anniversary!

sc-exhibitions.com/marvel

One of the most successful touring exhibitions ever!

The breathtaking recreation of the Pharaoh’s tomb is now open at the St. Louis Science Center with future bookings at OMSI Portland and a European tour. Book now for 2021/22, with the 100th anniversary of the discovery in 2022 in mind!

sc-exhibitions.com/kingtut

Our team at #Booth1223:

Meet Christoph Scholz, Brian Bouquet and Janna Holzer to discuss our touring exhibitions, and keep in mind that we host touring exhibitions in Germany, Austria and Switzerland.

We are now looking for exhibitions for the summer seasons 2020 – 2022 at our marquee venue – the 20,000 square feet exhibition hall at the historic Olympic Park in Munich, Germany.

You can reach Christoph at 206 4341320, and Brian at 310 9025461 – or contact us via sc-exhibitions.com.
Welcome to ASTC 2017!

Thank you for being here for this year’s annual conference of the Association of Science-Technology Centers (ASTC) and for your contribution to creating the largest global networking and professional development event for people who work in and with science centers and museums.

ASTC and the Tech Museum of Innovation, our conference host, welcome you to the beautiful city of San Jose, California, in the heart of Silicon Valley, for the 2017 ASTC Annual Conference.

We hope that over the next several days your work and that of your organization will be strengthened by what you experience here, by the others you meet in our field, and by the ideas and inspiration you take home with you.

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“Let us support the drive to explore, to gain knowledge, and to confidently pursue our daring search into the unknown.”

— Fred Kavli, Founder, The Kavli Foundation

Proud to present the
Alan J. Friedman Science Center Dialogues
2017 ASTC Annual Conference
Monday October 23, 2017, 10.45 - 11.30

The Kavli Foundation is dedicated to advancing science for the benefit of humanity, promoting public understanding of scientific research, and supporting scientists and their work.

www.kavlifoundation.org
Dear Colleagues:

I am looking forward to meeting as many of you as possible during the conference—come and say hello to me and to the ASTC Board and staff.

ASTC membership is made up of nearly 700 organizations in about 50 countries. There might be some differences in our business models, but fundamentally we are all striving to make science accessible, interesting, and relevant to our various communities. We are united in our quest to do this. So, coming together in San Jose for the premier event in the ASTC calendar provides the most wonderful opportunity to find out how colleagues are tackling the same issues as you. Be prepared to be challenging—and challenged. Think outside the box. I can promise that you will go home inspired and invigorated.

The past 12 months have certainly been eventful. We live in a world where alternative facts and fake news are given, increasingly, the same weight as information that has been verified by rigorous scientific analysis. This means that science centers have to work even harder to demonstrate their relevance and value.

But the year has also been punctuated by some amazing achievements. The first International Science Center and Science Museum Day took place last November. It was a big success, with more than 300 institutions taking part in the celebration, and I have every confidence that it will go from strength to strength in the years ahead. Although not every part of the world was lucky enough to experience the solar eclipse on August 21, it was a truly remarkable example of how science centers provide a unifying force, bringing thousands of people together to experience a rare phenomenon. And the World Biotech Tour, in collaboration with the Biogen Foundation, has now visited 12 countries and has had a real impact on the lives of young people, leaving a strong and lasting legacy. There are many more examples that you can find out more about during the conference.

This is my final year as Chair of ASTC. I am proud to have held the office and to have worked with such a team of hard-working, enthusiastic, and committed Board members and staff. A big thank you from me to you!

I’m really excited to be in Silicon Valley. As the Tech Museum’s President and CEO Tim Ritchie says, the area is a hotbed of innovation and creativity. It’s the perfect environment in which to have great ideas and great conversations. I will certainly be taking Tim’s advice to drink in both the ocean and the fabulous wines!

Have a wonderful conference.

Linda Conlon
ASTC Board Chair
Chief Executive, International Centre for Life
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Dear ASTC Colleagues:

Welcome to San Jose! On behalf of the ASTC staff and volunteers, I want to thank you for being here and participating fully. We plan and organize, but it’s you who makes the conference the world’s premier networking and professional development event for our field. All our surveys show that, above all, people value most the conversations they have with colleagues old and new. They enlighten, inspire, and invigorate. Along with the many sessions and major talks, we hope you will all find substantive learning experiences and a renewed sense of purpose.

I personally want to say a big thank you to the many volunteers in San Jose who have come to support this conference. We could not do it without them, and we appreciate their tireless endeavors to help everything run smoothly. For ASTC, this is our major event of the year, and all the team works together to make each year’s experience better than the last—my thanks to the ASTC team for all the hard work.

Our thanks also to our conference host, the Tech Museum of Innovation, and its president and CEO, Tim Ritchie, for enthusiastically welcoming our field to their community and institution—please be sure to leave enough time to visit on Museum Open House Day and explore their new exhibitions and activities. Deep appreciation also goes to the Conference Program Planning Committee, led by Karen Hager (Ontario Science Centre) and Kim Herlev (Experimentarium), whose members have worked hard to ensure a very rich range of sessions this year.

The Exhibit Hall is outstanding too, with all the latest traveling exhibitions, new products and services, and partnerships waiting to unfold. Events and activities will also be happening there throughout the conference. The main challenge will be to select from the myriad opportunities—and still find time for those important conversations.

Finally, I would like to thank the ASTC Board members, who have supported all the ASTC team’s efforts and who enable us, through their leadership and advice, to expand and improve what we offer each year. We are a community, committed to making a difference in people’s lives through science: My hope is that this conference gives us all a memorable moment and a real learning experience.

Sincerely,

Gillian Thomas
Interim CEO
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“GUITAR: The Instrument That Rocked The World”
Dear ASTC Colleagues,

Welcome to Silicon Valley: a place brimming with optimism, creativity and wealth but also beset with glaring disparities and challenges. It is a place where the world’s brightest entrepreneurs create innovations that change our lives for the better and introduce new ethical challenges that were, in the past, the stuff of science fiction. It is a place where science centers are deeply relevant because science and technology are deeply relevant.

I hope you will be able to take full advantage not only of the conference but of Northern California. We look forward to hosting you at The Tech and urge you to visit the other Bay Area science centers and children’s museums. Wander around some of the great universities and corporate campuses. Drink in the ocean air if you are able, and journey to the nearby wine regions. Experience the diversity that makes this region unique and catch a new vision for what positive difference you can make in your own.

I hope this conference equips and pushes us all to be what we need to be for the communities we serve. As the forces of globalization, environmental change and technology combine inexorably to shape our world, let us be institutions that lead the way in helping our communities thrive. As the voices of nativism and fear rise, let us be places where reason and evidence and tolerance give people visions of a better world.

Thank you for making the trip to our valley to attend ASTC 2017. I hope you go back with a sense that you are a part of a worldwide community of fellow travelers and fellow strugglers, each trying to do all they can to run institutions that help make our world brighter and better, sustainable and just.

Yours,

Tim Ritchie
President & CEO
The Tech Museum of Innovation
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October 21, 2017

The Tech Museum of Innovation
201 S. Market St.
San José, CA 95113

Dear members of the Association of Science-Technology Centers,

I would like to warmly welcome you to San José. As the capital of Silicon Valley, we take pride in our technological and scientific culture, so the City is honored to host the premier professional development gathering for the science center and museum field.

I deeply admire the work the ASTC has done over the last four and a half decades. It is integral to inspire learning for people of all ages, and there is no better way to provide this spark than through engaging and innovative exhibits.

Moreover, I am delighted to see that the organization is expansive and diverse. Not only do the over 600 members represent 48 countries and all 50 states, but they are a compilation of science centers, museums, nature centers, aquariums, planetariums, zoos, botanical gardens, as well as organizations and companies that share the same vision of an informal science education.

I hope that you enjoy our City and get the opportunity to see the Children’s Discovery Museum during your visit as well.

Warm regards,

Sam Liccardo
Mayor
City of San José
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FIVE GOALS FOR THE ASTC ANNUAL CONFERENCE

1. **Inspire**
   Attendees, both personally and professionally, through engaging dialogue and exciting speakers

2. **Build**
   Capacity through intense, focused sessions that share knowledge and push us to new ways of thinking

3. **Strengthen**
   Relationships that connect people and organizations in ways that advance our field

4. **Highlight**
   Innovations and expand our borders through inclusive and diverse experiences

5. **Focus**
   On strengthening the field by learning from past failures or challenges

October 21–24

ASTC 2017 Annual Conference
Habithèque and Hands On! Studio are proud to announce the opening of the interactive Mussel Hatchery at Fairmount Water Works.

Using the working lab as a backdrop, our creative team combined art, science, and storytelling to transform visitors from spectators to caretakers of the natural world.

How can we transform your visitors today?
General Conference Information

What Awaits You at ASTC 2017

- more than 100 concurrent educational sessions on topics as diverse as leadership, education and programming, exhibits and environments, development and member relations, innovations in science and technology, community engagement and outreach, and applications of research and evaluation
- an inspiring keynote presentation by Brendan Iribe on Saturday morning (see page 23)
- plenty of opportunities to network and forge connections with your fellow attendees from across the globe, including breakfast on Saturday, networking lunches on Saturday and Sunday, a refreshment break on Saturday afternoon, a beverage break on Sunday morning, and a networking reception on Sunday afternoon
- two full days of the Exhibit Hall, jam-packed with a wide range of products and services
- exploration, networking, and party time during Saturday night’s festivities at our host museum
- ASTC Community of Practice (CoPs) Meet-Ups, held Monday, October 23
- exploration behind the scenes of the Tech Museum of Innovation during Tuesday’s Museum Open House Day
- the latest films at Tuesday’s Big Screen Day at the Tech, sponsored by the Giant Screen Cinema Association
- the newest digital planetarium experiences, sponsored by Evans & Sutherland

ASTC 2018 Call for Proposals

Stay tuned for news about session proposals for the 2018 ASTC Annual Conference, and join the Brown Bag Lunch on Saturday to find out tips and strategies for strong submissions (see page 17).

ASTC Community of Practice (CoP) Meet-Ups

CoPs are groups of informal education professionals who share a concern or a passion for something they do and learn how to do it better as they interact regularly. Many of the CoPs will be meeting during the conference for brainstorming, planning, and networking. These meet-ups are open to all conference attendees, whether or not you have previously been involved with any CoPs. For a current list of ASTC CoPs, visit www.astc.org/professional-development/communities-of-practice. See Monday’s schedule for a list of meet-up times and locations.

ASTC Resource Center

Learn more about the association’s programs and activities, purchase our bestselling books, and meet ASTC staff at the Resource Center and Bookstore, located in the center of the Exhibit Hall. Find out what’s going on in professional development and Communities of Practice, public policy and advocacy, global engagement, research, and more. Members can sign up for free subscriptions to our award-winning bimonthly magazine, Dimensions, and our biweekly email newsletter, INFORMER. Stop by and learn how to take better advantage of your ASTC membership. Not a member? Come find out about the benefits of membership and even join on the spot. We hope to see you Saturday and Sunday.
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Big Screen/Planetarium Day
The Tech Museum of Innovation
Tuesday, October 24, 10:00 am to 5:00 pm

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NEW THIS YEAR

**ASTC Side Talks**

Sometimes you want to dive deeper. Join colleagues in this relaxed space to discuss topics and issues of current interest, outside the official program. Sign up here for a time slot to introduce a topic, or join an existing discussion. The Side Talks space will also host ASTC- and CAISE-facilitated discussions and debriefs with conference attendees and panelists immediately following a small number of pre-identified sessions, Saturday through Monday. Sessions that have an associated Side Talk will be marked on signage outside the session rooms.

**Bus Transportation**

Bus transportation is provided for one event:

- **Tuesday, October 24**
  - Outreach Live at Washington Elementary School
  - Bus will depart from the Convention Center at 8:30 a.m.

**Certificate of Completion**

If your institution or professional organization requires you to have a certificate of completion, please contact us after the conference at conference@astc.org.

**Certified Fund Raising Executive (CFRE) Credit**

Selected development-related sessions are approved for CFRE credit in Category 1.B-Education of the CFRE International application for initial certification and/or recertification. Applicable sessions are denoted with the CFRE 2017 logo.

NEW THIS YEAR

**Changing Communities**

Grab a marker and some friends (or people new to you) and add your contributions to this ever-changing, collaborative project inspired by the ways that science centers and museums influence their neighborhoods, countries, and planet.

**Conference App**

The app is back! Check your email from the ASTC Conference for information on how to download the app to your device, or pick up a help sheet at the registration desk.

**Conference Program Planning Committee**

Have a question about the conference? Want to share some feedback? Look for members of the Conference Program Planning Committee wearing this pin. We’d love to hear from you.

**Conference Mentor Program**

Launched in 2015, this program matches experienced members in the field with newcomers to science centers and museums based on their area of expertise. It is an opportunity for first-time conference attendees to get the most out of the conference, to develop new relationships, to learn tried-and-true tips for navigating the event, and to build relationships that will last beyond San Jose.

**Creating a Great Conference Session Brown Bag Lunch**

Want some practical advice on how to make your session proposal stand out from the crowd? Want to share your innovative practices, programs, and partnerships? Learn about key factors that will strengthen your session proposal for the 2018 ASTC Annual Conference in Hartford, Connecticut, during this brown bag lunch. Bring your lunch and join this interactive session on Saturday, October 21, from 1:00 to 1:45 p.m. in Meeting Room 212C.
Diversity Fundraiser
Since its launch in 2001, ASTC’s Diversity and Leadership Development Fellows Program has made it possible for more than 170 science center professionals from nearly 90 science centers and museums in the United States and Canada to participate in the ASTC Annual Conference. The fellowship exemplifies ASTC members’ commitment to reflecting the diversity of the audiences they serve. It supports the development and advancement of science center professionals from ethnic/racial minority backgrounds; those with disabilities; and those who identify as lesbian, gay, bisexual, transgender, queer, intersex, or asexual (LGBTQIA). Fellows receive free conference registration and a stipend of up to $1,000 to cover expenses. Support for this growing program is provided by a $12 contribution for admission to the Saturday Night Party at the Tech.

First Aid
First aid services will be available onsite beginning Friday, October 20. If you require assistance, please stop by the Registration Desk.

Flash Sessions
Flash Sessions are a collection of short (10-minute) presentations on various but often related topics, given by several people. One group of Flash Sessions will be presented each day on Saturday, Sunday, and Monday; check the program listings for more details.

Internet Access
ASTC will offer complimentary wireless internet access in the San Jose McEnery Convention Center.

Job Bank
The Job Bank is located in the ASTC Resource Center in the Exhibit Hall. Come by to browse job opportunities or check out the online listings on the ASTC website, www.astc.org/job-bank.

Mothers’ Room
This quiet space is located outside the Grand Ballroom, next to the restrooms. Inside there is a small crib, a chair, a coffee table, and a power outlet. When occupied, the sign on the door handle says “Do Not Disturb.”

Poster Presentations in the Exhibit Hall
A Poster Presentation is a visual display of an author’s work—using graphs, photographs, diagrams, and any sample educational materials developed—on a poster board. Two groups of Poster Presentations will take place in the Exhibit Hall on Saturday, October 21, and Sunday, October 22. Presenters will staff their respective posters to engage with attendees. Check the program listings for more details on poster titles and presenters.

NEW THIS YEAR
Our Roots
We’re crowdsourcing our own history! Science centers all over the world are responsible for innovations, initiatives, and ideas that continue to inspire—and on this giant timeline you can post a note, draw a picture, identify trends, connect the dots, and more while illustrating the development of the global science center field.

NEW THIS YEAR
[R4] Reflect + Relax + Recharge + Reconnect = A Quiet Space for Rebalancing
Need a peaceful sanctuary away from the crowd? This year we are providing the [R4] space for conference attendees to meditate, pray, or sit for a while. [R4] will be open from Friday, October 20, through Monday, October 23, 7:00 a.m.–5:00 p.m., at the San Jose McEnery Convention Center.

NEW THIS YEAR
San Jose Hidden Biotech Tour
Let the World Biotech Tour guide you on a biotech journey through downtown San Jose. Open your eyes—everything around you can transform into possible exhibits or experiments. On Sunday, October 22, become an explorer and together we will discover and describe the interrelatedness of public engagement and urban ecosystems. See the Other Events schedule for more information about this first-come, first served event.
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Brendan Iribe is the co-founder and vice president of PC VR at Oculus, where he oversees engineering and product development for Rift, Oculus Research, and computer vision. Oculus is a subsidiary of Facebook.

Before Oculus, Iribe served as chief product officer of Gaikai, a video game streaming platform acquired by Sony in 2012 that used cloud-based gaming technology to let people play games instantly. Prior to Gaikai, he spent a decade as co-founder and CEO of Scaleform, the number-one user interface technology provider in the video game market, which Autodesk acquired in 2011. Earlier in his career, Iribe worked as a game programmer and helped the Firaxis team develop the user interface for the video game Civilization IV.

Iribe has strong ties to the science center and museum field. While working in the multimedia division of ASTC-member Quatrefoil, a creator of custom museum exhibits, he brought new approaches to programming experiences for science centers. Iribe developed and produced interactive exhibits for institutions such as the Tech Museum of Innovation, the National Science Center, and other ASTC members.

He recently co-founded the Virtual Science Center (VSC), a Silicon Valley nonprofit with a mission to develop inquiry-based, out-of-school learning experiences about emerging technologies. His goals in developing VSC are to inspire the next generation of innovators; share the challenges of creating new technology; and promote science, technology, engineering, and mathematics learning.

Keynote sponsored by blackbaud
Imagine Exhibitions has over 25 years of experience in developing exhibitions that educate and excite while exceeding attendance goals. We are currently touring 25+ unique exhibitions around the world.
2017 Conference Tracks

Conference Tracks

Sessions are organized according to topical tracks:

- **Administration**: finances, business practices, facilities, risk management, etc.
- **Applications of Research and Evaluation**: research and evaluation methods and results, and how they can be applied to mission fulfillment
- **Community Engagement and Outreach**: programming to serve community constituencies, including teacher education programs; diversity and inclusion efforts; and collaborations with community organizations like universities, libraries, and afterschool providers
- **Development and Member Relations**: general development and membership strategies, and relations with individual donors, corporations, and foundations, etc.

- **Education and Programming**: models and outcomes of educational programming, including demonstrations, hands-on labs, theater, youth programs, adult events, teacher professional support, etc.
- **Exhibits and Environments**: development and design of any science learning environment (physical or virtual, in museums or public spaces), and trends affecting design and development approaches
- **Immersive Media and Experiences**: development and programming related to planetariums, large-format films, stereoscopic theaters, simulators, and related environments
- **Innovations in Science and Technology**: STEM research collaborations, emerging technologies, etc.
- **Leadership**: issues of governance, strategic vision, mission fulfillment, and organizational/field strategies for the future
- **Staff and Workforce Development**: development and support of the science center professional workforce, from skill building to career pathways, including staff roles such as volunteer management, human resources, visitor services, etc.
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PRECONFERENCE EVENTS

THURSDAY, OCTOBER 19

9:00 a.m.–7:00 p.m.

ASTC Diversity and Leadership Development Fellows Opening Session
Convention Center, Meeting Room 212D
For 2017 fellows, alumni, and invited guests.

4:30–6:00 p.m.

ASTC Conference Program Planning Committee Welcome Reception
Convention Center, Market Terrace
For members only.

FRIDAY, OCTOBER 20

7:00 a.m.–5:00 p.m.

Registration Open
Convention Center, Concourse Level Prefunction

8:00 a.m.–12:00 p.m.

ASTC Board of Directors Meeting
Marriott, Blossom Hill I & II
For ASTC Board members, committee chairs, and invited guests.

8:00 a.m.–1:00 p.m.

ASTC Diversity and Leadership Development Fellows Workshop
Convention Center, Meeting Room 212D
For 2017 fellows, alumni, and invited guests.

8:00 a.m.–5:00 p.m.

CAISE Broadening Participation Task Force Convening 2017
Convention Center, Meeting Room 232
The first convening of CAISE’s Broadening Participation Task Force, charged with exploring potential areas of synergy between informal science education and science communication viewed through the lens of broadening participation. By invitation only.

8:00 a.m.–1:00 p.m.

EDUCATION AND PROGRAMMING

Preschool Programmers—Bringing Computational Thinking to Our Youngest Visitors
Convention Center, Executive Ballroom 210G
The release of the K–12 computer science framework in 2016 has established coding as a fundamental component of 21st century literacy. But what exactly does computer science education look like for preschoolers? In this hands-on workshop for educators, learn how computational thinking for young visitors goes beyond coding to reinforce skills essential to reading, math, and social development. Please bring your laptop and/or phone. Preregistration required.

LEADERSHIP

ASTC Un-conference
Convention Center, Executive Ballroom 210C
In this un-conference, attendees discuss late-breaking issues to create an informal set of pick-up sessions during interstitial openings and at after-hours events during the conference.
Preregistration required.

Session Leader: Kate Livingston, Principal, ExposeYourMuseum LLC, Denver, Colorado
Presenters: Chip Lindsay, Children’s Museum of Pittsburgh, Pittsburgh, Pennsylvania; Dana Schloss, New York Hall of Science, Queens, New York; Peggy Monahan, New York Hall of Science, Queens, New York; Preeti Gupta, American Museum of Natural History, New York, New York; Joe Heimlich, COSI, Columbus, Ohio; Julie Johnson, National Science Foundation, Arlington, Virginia; Troy Livingston, ExposeYourMuseum, Denver, Colorado; Laura Huerta-Migus, Association of Children’s Museums, Arlington, Virginia; and Katherine Ziff, TELUS Spark, Calgary, Alberta, Canada

EDUCATION AND PROGRAMMING

Designing Experiences for Linguistically Diverse Communities
Children’s Discovery Museum of San Jose
How can we engage and design science experiences for linguistically diverse communities? Join us to experience strategies used in various education settings, while immersing yourself in a different language. You will also develop an action plan for implementing new strategies into interactions that you are currently teaching, developing, or piloting.
Preregistration required.

Session Leader: Cindy Valencia, Bilingual Education Specialist, California Academy of Sciences, San Francisco, California
Presenters: Cindy Valencia, California Academy of Sciences, San Francisco, California; Claudia Tibbs, Monterey Bay Aquarium, Monterey, California; Lynn Uyen Tran, Lawrence Hall of Science, Berkeley, California; and Esther Tang, California Academy of Sciences, San Francisco, California

STAFF AND WORKFORCE DEVELOPMENT

Reflecting on Practice—A Community Gathering
Convention Center, Meeting Room 211CD
Reflecting on Practice (RoP) is a professional learning program for informal science educators to build community and capacity. Come to this workshop to learn and actively participate in new activities and discussions on current research on learning from the curriculum. Meet, connect with, and share stories with other RoP Facilitators.
Preregistration required.

Session Leader: Lynn Uyen Tran, Director of Research, Lawrence Hall of Science, Berkeley, California
Presenters: Lindzy Bivings, California Academy of Sciences, San Francisco, California; Catherine Halversen, Lawrence Hall of Science, Berkeley, California; and Kathryn Danielson, California Academy of Sciences, San Francisco, California

9:00 a.m.–5:00 p.m.

EDUCATION AND PROGRAMMING

NEON: National Education Outreach Network
Convention Center, Executive Ballroom 210E
Outreach programs stand on the cutting edge of science center programming. Outreach professionals from around the world will meet to learn about all aspects of the field, with brainstorming sessions, hands-on activities, numerous presentations, and more. Outreach veterans and rookies alike will benefit from NEON.
Preregistration required.

Session Leader: Jonah Cohen, Manager, Science Education, McWane Science Center, Birmingham, Alabama
Presenters: Paul Taylor, The Franklin Institute, Philadelphia, Pennsylvania, and Nicole Rife, COSI, Columbus, Ohio
EDUCATION AND PROGRAMMING

Hotter Cities, Cooler Science! Using Research-based Tools to Create Positive Conversations about Climate Change

Convention Center, Executive Ballroom 210A

How do we open up conversations about climate change and make them more approachable? Join Climate & Urban Systems Partnership project members from different organizations as we share our well-tested tools and resources, provide time and materials for adapting activities, and explore the learning research behind these public engagement strategies.

Preregistration required.

Session Leader: Richard Johnson, Senior Program Manager, Climate & Urban Systems Partnership, The Franklin Institute, Philadelphia, Pennsylvania

Presenters: Michaela Labriole, New York Hall of Science, Queens, New York; Mandela Lyon, Carnegie Museum of Natural History, Pittsburgh, Pennsylvania; and Mary Ann Steiner, Steiner Learning Design, Pittsburgh, Pennsylvania

EDUCATION AND PROGRAMMING

My Sky Tonight: Engaging Young Children in the Science of Astronomy

Convention Center, Executive Ballroom 210B

Bring the excitement of astronomy to pre-K children and their families! Educators will learn developmentally appropriate methods of engaging young children in the practices of science. We will showcase a set of hands-on astronomy activities designed for 3- to 5-year-old children and tested at multiple museums.

Preregistration required.

Session Leader: Anna Hurst, Director of Museum, Park, & Library Programs, Astronomical Society of the Pacific, San Francisco, California

Presenters: Danielle Bardellini, Astronomical Society of the Pacific, San Francisco, California; Michele Crowl, Discovery Space of Central Pennsylvania, State College, Pennsylvania; and Maureen Callanan, University of California, Santa Cruz, Santa Cruz, California

EDUCATION AND PROGRAMMING

Developing Professional Development Programs for Your Institution: What Is the Right Fit for You?

Convention Center, Executive Ballroom 210F

Participate in activities using ASTC’s new professional development toolkit and facilitator’s handbook, which will guide you through designing and implementing professional development programs at your institution. Explore six successful models of professional development that use best practices, including needs assessments, marketing, workshop design, funding, and developing relationships with school districts.

Preregistration required.

Session Leader: Sandra Ryack-Bell, Executive Director, Museum Institute for Teaching Science, Quincy, Massachusetts

STAFF AND WORKFORCE DEVELOPMENT

Making Space for Making: A Professional Development Opportunity
The Bowers Institute, The Tech Museum of Innovation

Join us for a professional development day dedicated to making and tinkering. This immersive workshop takes place at the Tech Museum of Innovation, in the Tech Studio. Whether you’re expert or novice at this maker-centered learning thing, you’ll leave with ideas to try, along with an expanded network of colleagues.

Preregistration required. No transportation provided.

Session Leader: Karen Wilkinson, Tinkering Studio Director, Exploratorium, San Francisco, California
Session Moderator: Mike Petrich, Making-Learning Studio Director, Exploratorium, San Francisco, California

Presenters: David Wells, New York Hall of Science, Queens, New York; Keith Braafladt, Science Museum of Minnesota, St. Paul, Minnesota; Monika Mayer, Lawrence Hall of Science, Berkeley, California; Prinda Wanakule, The Tech Museum of Innovation, San Jose, California; Lisa Regalla, Bay Area Discovery Museum, Sausalito, California; Sherlock Terry, Montshire Museum of Science, Norwich, Vermont; Lisa Brahms, Children’s Museum of Pittsburgh, Pittsburgh, Pennsylvania; Lianna Kali, Exploratorium, San Francisco, California; Lydia Beall, Museum of Science, Boston, Massachusetts; Anthony Pelaez, MOSI (Museum of Science & Industry), Tampa, Florida; Kathleen Lauson, Arkansas Discovery Network, Little Rock, Arkansas; Brittney Kluger, Discovery Museum, Little Rock, Arkansas; Peter Wardrip, Children’s Museum of Pittsburgh, Pittsburgh, Pennsylvania; Liz Whitewolf, Carnegie Science Center, Pittsburgh, Pennsylvania; Reid Bingham, New York Hall of Science, Queens, New York; Annalise Phillips, New York Hall of Science, Queens, New York; Rebekah Nelson, The Tech Museum of Innovation, San Jose, California; Anja Scholze, The Tech Museum of Innovation, San Jose, California; Seongchan Cho, Gwacheon National Science Museum, Gwacheon, Republic of Korea; Mansun Yu, Gwacheon National Science Museum, Gwacheon, Republic of Korea; Chaeson Kuon, Gwacheon National Science Museum, Gwacheon, Republic of Korea; Mansik Park, Gwacheon National Science Museum, Gwacheon, Republic of Korea; and Matt Chilbert, Lawrence Hall of Science, Berkeley, California

CEO Forum
Marriott, San Jose Ballroom III

At the CEO Forum, science center and museum executives can discuss critical issues for the field and ways to improve the function and impact of science centers around the world.

Preregistration required. For CEOs of science museums and institutions.

EDUCATION AND PROGRAMMING

Early Science Learning—Resources, Tools, and Activities to Help Adults Support Children’s Science Learning
Convention Center, Executive Ballroom 210G

How do we close confidence and knowledge gaps in preschool teachers, parents, and other adults to support science in the early years? Learn about early childhood professional development and family engagement programs that promote open-ended, science process skills. Try hands-on activities supported by research and explore model programs.

Preregistration required.

Session Leader: Michelle Kortenaar, Senior Director of Engagement and Learning, Sciencenter, Ithaca, New York

Presenters: Miriam Krause, Maryland Science Center, Baltimore, Maryland; Melissa Thomas, Saint Louis Science Center, St. Louis, Missouri; Ellen Blinderman, Lawrence Hall of Science, Berkeley, California; Zoe Peters, Bay Area Discovery Museum, Sausalito, California; Laurinda Willard, Turtle Bay Exploration Park, Redding, California; Cheryl Juarez, Phillip and Patricia Frost Museum of Science, Miami, Florida; Victoria Fioraldisi, Sciencenter, Ithaca, New York; and Bethany Resnick, Sciencenter, Ithaca, New York
EDUCATION AND PROGRAMMING

**Taking a Deeper Dive into Community and Citizen Science at Science Centers and Museums**

**Convention Center, Executive Ballroom 210H**

Are you already leading citizen science programs at your museum or science center? This workshop will help you deepen your program. Join leaders and peers from the field to share tips for starting projects, training, developing community partner relationships, grant applications, developing and measuring learning outcomes, and widening your citizen science network!

Preregistration required.

**Session Leader:** Lila Higgins, Manager, Citizen Science and Live Animals, Natural History Museum of Los Angeles County/Page Museum at the La Brea Tar Pits, Los Angeles, California

**Presenters:** Lila Higgins, Natural History Museum of Los Angeles County/Page Museum at the La Brea Tar Pits, Los Angeles, California; Chelle King, Phillip and Patricia Frost Museum of Science, Miami, Florida; Rick Bonney, Cornell Lab of Ornithology, Ithaca, New York; Alison Young, California Academy of Sciences, San Francisco, California; Christine Goforth, North Carolina Museum of Natural Sciences, Raleigh, North Carolina; Richard Smart, Natural History Museum of Los Angeles County/Page Museum at the La Brea Tar Pits, Los Angeles, California; and Heidi Ballard, University of California, Davis, Davis, California

**IMMERSIVE MEDIA AND EXPERIENCES**

**Create a World in Half a Day (Virtually)**

**Convention Center, Executive Ballroom 210C**

Discover how to use Virtual Reality to give visitors immersive experiences in physically impossible worlds: from the quantum scale to four-dimensional mathematics. In this hands-on workshop, you will create your own virtual experience with a phone-based viewer (please bring your own phone and laptop). No programming or design background is required.

Preregistration required.

**Session Leader:** Geva Patz, Technology Consultant, Museum of Mathematics, New York, New York

**Presenter:** Cindy Lawrence, Museum of Mathematics, New York, New York

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**2:00–5:00 p.m.**

**Leading through Challenging Times: ASTC Diversity and Leadership Development Fellows Alumni Symposium**

**Marriott, San Jose Ballroom I**

Whether it is struggle from political or social turmoil, economic difficulties, a great community loss, or organizational instabilities, there are several situations that call for leadership at all levels in museums to know how to lend an unbiased ear, to lift morale, and to find proactive solutions to help staff feel supported during these difficult times. Join ASTC Diversity and Leadership Development Fellowship alumni, museum professionals at all levels, and a community expert as we share strategies for navigating challenging situations. Open to alumni and interested friends.

Preregistration required.

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**5:00–6:00 p.m.**

**Conference Navigation and Networking**

**Convention Center, Meeting Room 211CD**

Is this your first time at the ASTC Annual Conference? Been a while since your last one? Want to know what is happening at this year’s conference? This is the session for you! Members of ASTC’s Conference Program Planning Committee (CPPC) and representatives from our host museum will provide you with some ideas and suggestions on how to navigate the conference as well as the host city. They will provide an overview of key networking opportunities, and set the stage by beginning the networking at this session with other first-time attendees and CPPC members.

Preregistration required.
6:00–7:00 p.m.

Welcome to San Jose Meet-ups
Various Locations
Staff members from the Tech Museum of Innovation will gather throughout downtown San Jose to welcome ASTC 2017 attendees in these social settings before the conference officially gets underway on Saturday. Let the networking commence!

Affinity Bar
300 Almaden Boulevard

Britannia Arms
173 West Santa Clara Street

Coffee to Cocktails Bar
282 Almaden Boulevard

The Continental Bar Lounge & Patio
349 1st Street

Loft Bar and Bistro
90 South 2nd Street

Rookies Sports Lodge
99 South 1st Street

The Continental Bar Lounge & Patio
349 1st Street

6:00–9:00 p.m.

The Educators Network (TEN) Social
Marriott, Blossom Hill I & II
Begin the 2017 ASTC Conference by networking with fellow educators from informal and/or formal settings. Join us for the upbeat TEN social in San Jose to reconnect with familiar colleagues and initiate new relationships.
Preregistration required.

7:00–9:00 p.m.

Leadership Reception
Adobe Corporate Headquarters,
The Steps Center
By invitation only.
SATURDAY, OCTOBER 21

7:00 a.m.–5:00 p.m.
Registration Open
Convention Center, Concourse Level Prefunction

7:30–8:00 a.m.
Meet and Greet Breakfast
Convention Center, Grand Ballroom 220

8:00–10:45 a.m.
Opening Keynote Presentation with Brendan Iribe and Roy L. Shafer Leading Edge Awards Ceremony
Convention Center, Grand Ballroom 220
Keynote Presentation
Sponsored by Blackbaud
Roy L. Shafer Leading Edge Awards Ceremony
Sponsored by Group Delphi

10:45 a.m.–6:15 p.m.
Exhibit Hall Open
Convention Center, Halls 1 & 2
Open to all registered attendees.

11:30 a.m.–12:45 p.m.
EDUCATION AND PROGRAMMING
Using Games, Competitions, and Meaningful Play as Audience Engagement Tools
Convention Center, Meeting Room 211AB
When implementing educational programs, museums should consider the interactivity level of activities. Designing and playing games isn’t just fun, it teaches valuable skills needed for effective learning. This panel will discuss topics such as game jams, interactive summer camps, and game design in the classroom and after school programs.

Session Leader: Ian Zang, Assistant Manager, Science and Education, Carnegie Science Center, Pittsburgh, Pennsylvania
Presenters: Mariah Romaninsky, The Academy of Natural Sciences of Drexel University, Philadelphia, Pennsylvania; Rik Panganiban, California Academy of Sciences, San Francisco, California; and Dennis Casey, Virginia Museum of Natural History, Martinsville, Virginia

APPLICATIONS OF RESEARCH AND EVALUATION
Small, but Mighty: Successes and Struggles in Building Evaluation Capacity in Small Museums
Convention Center, Executive Ballroom 210E
Evaluation can feel like a big job for small museums. Hear how small institutions in the Collaboration for Ongoing Visitor Experience Studies (COVES) have overcome barriers to data collection and find out what they’ve learned in the process. Participants will leave with resources equipping them for evaluation at their home institutions.

Session Leader: Michelle Kenner, Association Services Programs Specialist, Association of Science-Technology Centers, Washington, D.C.
Session Moderator: Sarah Cohn, Senior Evaluation and Research Associate, Science Museum of Minnesota, St. Paul, Minnesota
Presenters: Linda Deck, Bradbury Science Museum, Los Alamos National Laboratory, Los Alamos, New Mexico; Megan Pratt, The Pensacola MESS Hall, Pensacola, Florida; and Michael Rathbun, Discovery Center Museum, Rockford, Illinois
Children and families are invited to the enchanting world of Dora the Explorer, her animal-rescuing cousin Diego, and their friends Boots and Baby Jaguar! Here they can explore Isa’s Flowery Garden, help Tico gather nuts, join the Pirate Piggies’ crew as they set sail, and search for baby animals in the Rainforest Maze.

Preschoolers will role-play, solve problems, practice sharing and caring behaviors, and learn Spanish words. Everyone will celebrate a successful day—We did it! ¡Lo hicimos!

Available Spring 2018!

For more information, visit Booth 1010 or contact:
Lisa Coleman, Traveling Exhibits Coordinator,
lisac@childrensmuseum.org or 317-334-3822
LEADERSHIP

How To Be a Good Mentor
Marriott, San Jose Ballroom I

Are you in a place in your career where you have wisdom to share and a desire to help another develop? During this session, you will focus your skills, consider your attributes, and discuss how to best serve mentees from the science center field. Hopeful and experienced mentors are invited.

Session Leader: Ann Hernandez, Program Manager, Professional Development, Association of Science-Technology Centers, Washington, D.C.

Presenters: Cheronda Frazier, Center for Aquatic Sciences at Adventure Aquarium, Camden, New Jersey; Adrienne Barnett, Thinkery, Austin, Texas; and Eric Godoy, Denver Museum of Nature & Science, Denver, Colorado

LEADERSHIP

Access Isn’t Easy
Convention Center, Executive Ballroom 210A

Access and inclusion programs are making museums more accessible, welcoming, and relevant. They also present an array of leadership challenges. This session will explore the cultural shifts that museum leaders must navigate so that staff, volunteers, board members, and visitors embrace the diversity of learners that reflect our communities.

Session Leader: Jennifer Rickards, Associate Director & Director of Development and Visitor Services, Montshire Museum of Science, Norwich, Vermont

Session Moderator: Jennifer Rickards, Associate Director & Director of Development and Visitor Services, Montshire Museum of Science, Norwich, Vermont

Presenters: Kristin Leigh, Explora, Albuquerque, New Mexico, and Christine Reich, Museum of Science, Boston, Massachusetts

EDUCATION AND PROGRAMMING

Moving the Needle on Environmental Sustainability Actions
Convention Center, Meeting Room 212AB

How can informal science institutions help people implement impactful, sustainable behaviors in their daily lives? Learn about tools and methods aimed at inspiring individual and collective behavior change; hone in on which environmental problems to tackle; discover ways to initiate productive conversations; and learn strategies for training staff and volunteers.

Session Leader: Lindzy Bivings, Senior Manager, School & Community Programs, California Academy of Sciences, San Francisco, California

Presenters: Elizabeth Bagley, California Academy of Sciences, San Francisco, California; Lynn Tran, Lawrence Hall of Science, Berkeley, California; Catherine Halversen, Lawrence Hall of Science, Berkeley, California; Jesse Lovejoy, 49ers Museum, Santa Clara, California; and Katie Excoffier, Genentech, South San Francisco, California

EXHIBITS AND ENVIRONMENTS

“Smart Exhibits”—Using Technology to Create Dynamic Content and Enhance Visitor Engagement
Convention Center, Executive Ballroom 210F

How can new technologies be harnessed to scaffold learning and enhance visitor engagement? Through examples, we will explore the concept of “Smart Exhibits,” exhibits that change their content in response to their environment and/or visitors’ behavior using, for example, machine vision, sensor arrays, and data mining.

Session Leader: Eyal Shahar, Exhibit Developer, New Media, Exploratorium, San Francisco, California

Session Moderator: Eyal Shahar, Exhibit Developer, New Media, Exploratorium, San Francisco, California

Presenters: Bryan Bayles, The Witte Museum, San Antonio, Texas; Eric Mika, Local Projects, New York, New York; Elly Jessop Nattinger, Google, Mountain View, California; Eyal Shahar, Exploratorium, San Francisco, California; and Jacqueline Wong, Exploratorium, San Francisco, California

COMMUNITY ENGAGEMENT AND OUTREACH

Museums for All: Expanding Access
Convention Center, Executive Ballroom 210D

Attendees will hear from representatives of the organizations behind Museums for All (the Institute of Museum and Library Services and the Association of Children’s Museums) as well as four participating museums to learn about the program, why museums want to be a part of it, challenges they’ve faced and overcome, and how they’ve individually tailored and supported the program.

Session Leader: Brendan Cartwright, Project Manager, Special Initiatives, Association of Children’s Museums, Arlington, Virginia

Session Moderator: Paula Gangopadhyay, Deputy Director, Museum Services, Institute of Museum and Library Services, Washington, D.C.

Presenters: Heather Norton, Orlando Science Center, Orlando, Florida; Beth Crounover, The Field Museum, Chicago, Illinois; Lisa Trahan, Lawrence Hall of Science, Berkeley, California; and Paula Gangopadhyay, Institute of Museum and Library Services, Washington, D.C.
ADMINISTRATION

Membership Magic! Creating and Reshaping Membership for Growth and Revenue Support

Convention Center, Executive Ballroom 210C

Membership programs provide needed community buy-in and revenue support to our missions and museums. Hear from two leading institutions that have recently reinvented their membership programs by creating state-of-the-art acquisition and engagement efforts that utilize research, multi-channel membership marketing techniques, and best-in-practice tactics to create magic in their membership programs.

Session Leader: Dana Hines, President and CEO, Membership Consultants, Inc., St. Louis, Missouri
Session Moderator: Dana Hines, President and CEO, Membership Consultants, Inc., St. Louis, Missouri
Presenters: Dana Hines, Membership Consultants, Inc., St. Louis, Missouri; Glenn Howard-Erevia, The Phillip and Patricia Frost Museum of Science, Miami, Florida; Rosie Siemer, Fiveseed, LLC, Denver, Colorado; and Joe Urbano, The Tech Museum of Innovation, San Jose, California

EDUCATION AND PROGRAMMING

Camp Inclusion

Convention Center, Executive Ballroom 210B

Join us for “Camp Inclusion” to learn how science center camps appeal to children on spectrum, explore the success and challenge of inclusion with camp operations, discuss staff training resources, and play with activities adapted for children of all abilities.

Session Leader: Traci Kallhoff, Director of Education, Exploration Place, The Sedgwick County Science and Discovery Center, Wichita, Kansas
Presenters: Kasey Brown, Kentucky Science Center, Louisville, Kentucky; Brenda Boddiger, Museum of Discovery and Science, Fort Lauderdale, Florida; Amy Wiggin, Thinkery, Austin, Texas; Jessica McDermott, The Franklin Institute, Philadelphia, Pennsylvania; and Sarah Pratt, Explora, Albuquerque, New Mexico

COMMUNITY ENGAGEMENT AND OUTREACH

Kwul. ‘I’tking. To Make: A Homegrown Native STEM Workforce

Convention Center, Executive Ballroom 210H

The spectrUM Discovery Area and SciNation, its nationally recognized tribal advisory group, share their efforts to inspire a homegrown native STEM workforce through co-created programming. Learn about their newest project, an NSF-funded mobile makerspace that weaves together conventional and cultural making. Participate in making activities to bring to your museum.

Session Leader: Holly Truitt, Co-Director, spectrUM Discovery Area, Missoula, Montana
Presenters: Jessie Herbert, spectrUM Discovery Area, Missoula, Montana; Nicholas Wethington, spectrUM Discovery Area, Missoula, Montana; and William Swaney, Confederated Salish and Kootenai Tribes, Arlee, Montana

INNOVATIONS IN SCIENCE AND TECHNOLOGY

Explore, Experiment, and Empower: Engaging Museum Visitors with Data Using Science Journal

Convention Center, Meeting Room 211CD

How might we use new, yet accessible, tech to improve data literacy? In this interactive session, we’ll share research and learning from developing experiences with Science Journal, a free app by Google, that allows visitors to collect data using smartphone sensors. We’ll also do the activities, generating our own data!

Session Leader: Prinda Wanakule, Educator, Designer, The Tech Museum of Innovation, San Jose, California
Presenters: Lauren Cage, The Tech Museum of Innovation, San Jose, California; Anne Richardson, Exploratorium, San Francisco, California; Amit Deutsch, Google Making & Science, Mountain View, California; Justin Koh, Google Making & Science, Mountain View, California; and Adam Maltese, Indiana University, Bloomington, Indiana
FLASH SESSIONS
Access, Inclusion, and Culture
11:30 a.m.–12:45 p.m., Convention Center, Executive Ballroom 210G

Moderator: Andrea Motto, After School Program Director, Yale Peabody Museum of Natural History, New Haven, Connecticut

Creating Collaborative Culture: How Learning Circles Can Spark Innovation and Promote Change
Although few would argue that creating a collaborative culture is an easy task, it is certainly not an impossible one. In fact, it is likely that forms of collaborative culture exist within every organization. The challenge is supporting and sustaining it. Discover how learning circles can be a viable solution.
Presenter: Christian Greer, Saint Louis Science Center, St. Louis, Missouri

Using Signing Glossaries to Create Inclusive Experiences for Visitors Who Are Deaf or Hard-of-Hearing
This session will highlight innovative features of signing glossaries designed to enhance access during visits to aquariums, botanical gardens, natural history museums, science museums, and zoos. It will include lessons learned and examples from a project for deaf and hard-of-hearing visitors that resulted in more inclusive experiences.
Presenter: Judy Vesel, TERC, Cambridge, Massachusetts

A Place for Everyone: The Power of an Extra Seat to Influence Behavior at Exhibits
A brief presentation on the effects of seating in an exhibit will be presented. The presenter will engage the audience by providing a variety of seating options and discussing the effects of those seating arrangements on their personal comfort and making connections back to seating in science exhibits.
Presenter: Jessica Bradt, California Science Center, Los Angeles, California

Can Museums Impact the Poverty-Education Cycle? A Look at a Low-income STEM Educational Model
Early childhood interventions may be critical to addressing challenges of poverty. This session will present the story of an early childhood STEM collaboration between a museum and low income public schools. From initiating the program to evaluating outcomes, risks and benefits of creating a sustainable museum-school partnership will be addressed.
Presenters: Debbie Cockerham, Fort Worth Museum of Science and History, Fort Worth, Texas, and Cathy Barthelemy, Fort Worth Museum of Science and History, Fort Worth, Texas

It Takes a Village: Cultural Partners Provide Sensory-Friendly Programming for Families Impacted by Autism
Since April 2016, the Ann Arbor Hands-On Museum has led a unique, community-wide effort to provide programming for visitors affected by autism. The museum will tell the story of how and why My Turn: A Sensory-Friendly Sunday was developed and its impact on this particular audience.

To Dare or Not to Dare. Questions of Guts or of Institutional Culture? Braveness Recipe
The meaning of what is risky for a cultural institution is questioned. The case history of an Italian science museum (Muse) uncovers the major hindrance in daring to fail. The little experience in risk-management of many public cultural institution in Italy calls for International peers advice.
Presenter: Antonia Caola, Museo Delle Scienze, Trento, Italy
Networking Lunch in the Exhibit Hall
Convention Center, Halls 1 & 2
Complimentary lunch will be offered in the Exhibit Hall.

Meet the Fellows
Convention Center, Halls 1 & 2, Demo Stage
Chevy Humphrey, the Hazel A. Hare President and CEO of the Arizona Science Center, introduces and interviews this year’s ASTC Diversity and Leadership Development Fellows.

Creating a Great Conference Session Proposal
Brown Bag Lunch
Convention Center, Meeting Room 212C
Want some practical advice on how to make your session proposal stand out from the crowd? Want to share your innovative practices, programs, and partnerships? Learn about the updated guidelines and key factors that will strengthen your session proposal for the 2018 ASTC Annual Conference in Hartford, Connecticut.

INNOVATIONS IN SCIENCE AND TECHNOLOGY
Using Digital Collections of Natural History Museums to Enhance K–12 Learning: Best Practice Recommendations
Convention Center, Executive Ballroom 210H
A gathering of collections personnel, educators, and evaluators resulted in a document promoting best practices for using online collections in education. Learn about some digital collections projects, get a copy of the draft document, and contribute to the creation of recommendations for the use of this emerging digital resource.

Session Leader: Liz Baird, Chief, School and Lifelong Education, North Carolina Museum of Natural Sciences, Raleigh, North Carolina
Session Moderator: Adania Flemming, Graduate Student, Florida Museum of Natural History, Gainesville, Florida
Presenters: Anne Basham, Arizona State University, Tempe, Arizona, and Christine Goforth, North Carolina Museum of Natural Sciences, Raleigh, North Carolina

EDUCATION AND PROGRAMMING
Under Pressure: Doing Demonstrations with Air
Convention Center, Executive Ballroom 210F
From old classics to new variations, this session will blow you away with a tutorial on demonstrations utilizing air and pressure. Join the ranks of the Air-Heads, and learn about equipment, presentation tips, how to connect the science content, and tricks of the trade for getting optimal results.

Session Leader: Jonah Cohen, Manager of Science Education, McWane Science Center, Birmingham, Alabama
Presenters: Paul Taylor, The Franklin Institute, Philadelphia, Pennsylvania; Nicole Rife, COSI, Columbus, Ohio; Rachel Cahill, Lancaster Science Factory, Lancaster, Pennsylvania; Sarabeth Gordon, The Pensacola MESS Hall, Pensacola, Florida; and Carl Nelson, Imagination Station, Toledo, Ohio

Once upon a Time . . . Using Story to Engage
Convention Center, Meeting Room 211AB
To attempt to teach science without narrative is to do so with one hand tied behind your back. An engaging story can provide bring scientific ideas alive. It engages the visitor in a journey, rather than asking them to be an observer of a list of facts.

Session Leader: Karen Hager, Director, Science Engagement, Ontario Science Centre, Toronto, Ontario, Canada
Presenters: Eddie Goldstein, Independent Consultant, Superior, Colorado, and Jennifer Richards, Montshire Museum of Science, Norwich, Vermont
COMMUNITY ENGAGEMENT AND OUTREACH

Designing Accessible Maker Programs for Participants with Disabilities

Convention Center, Executive Ballroom 210D

Learn about how to ensure that makerspaces and programs are inclusive of, and accessible to, people with disabilities. An expert maker and an access educator from two contrasting museums will share best practices and lessons learned. Participants will brainstorm adaptations to design challenges and consider applications to their own work.

Session Leader: Charlotte Martin, Museum Educator for Access Programs, Intrepid Sea, Air & Space Museum, New York, New York
Presenter: Rebecca Grabman, Children’s Museum of Pittsburgh, Pittsburgh, Pennsylvania

COMMUNITY ENGAGEMENT AND OUTREACH

Getting to Purple: Engaging Audiences in Dialogue on Challenging Issues

Convention Center, Executive Ballroom 210G

How can science museums be a safe place for challenging ideas, opening people’s eyes to understandings of the other side, and the equivocation that is science? Discuss your successes and failures with museum colleagues as we explore programs, exhibits, and strategies that respect visitors’ views but convey challenging science concepts.

Session Leader: Megan Pratt, Executive Director, The Pensacola MESS Hall, Pensacola, Florida
Presenters: Elisabeth Demke, Gateway to Science, Bismarck, North Dakota; Becca Hatheway, National Center for Atmospheric Research/UCAR, Boulder, Colorado; Andrew Lloyd, International Centre for Life, Newcastle upon Tyne, United Kingdom; Brindha Muniappan, MIT Museum, Cambridge, Massachusetts; and David Sittenfeld, Museum of Science, Boston, Massachusetts

LEADERSHIP

Build It and They Will Come? Exploring the Value of Partnerships in Entrepreneurship and Mentoring

Convention Center, Meeting Room 212C

Want professional feedback on that game you designed? Tips on pitching ideas? Mentoring and coding support? Sounds good, but are science centers the right place to get these? Join this “fishbowl” session and jump into the ring to discuss programs on entrepreneurship with science center staff and student participants.

Session Leader: Barbara Punt, President and Chief Project Manager, Punt Consulting Group, Redondo Beach, California
Session Moderator: Barbara Punt, President and Chief Project Manager, Punt Consulting Group, Redondo Beach, California
Presenters: Barbara Punt, Punt Consulting Group, Redondo Beach, California; Tapio Koivu, Heureka, the Finnish Science Centre, Vantaa, Finland; Heather Norton, Orlando Science Center, Orlando, Florida; Curt Simmons, Science Center of Iowa & Blank IMAX Dome Theater, Des Moines, Iowa; Anna Medina, Uber, San Francisco, California; and Annelise Kettmann, Los Gatos High School, Los Gatos, California

COMMUNITY ENGAGEMENT AND OUTREACH

NASA and Beyond: Field Experience in Developing Entrepreneurial Partnerships

Convention Center, Executive Ballroom 210B

Dare to “start-up” partnerships in unexpected ways and extend your reach into the community with ideas from awardees under NASA’s Competitive Program for Science Museums, Planetariums, and Visitor Centers. Learn challenges, solutions, risks, and rewards in developing entrepreneurial community relationships, from diverse institutions currently designing and implementing NASA-themed projects.

Session Leader: Leslie Lowes, Informal Education Specialist, Jet Propulsion Laboratory, Pasadena, California
Session Moderator: Leslie Lowes, Informal Education Specialist, Jet Propulsion Laboratory, Pasadena, California
Presenters: Alicia Frascati, Orlando Science Center, Orlando, Florida; Anne Holland, Space Science Institute, Boulder, Colorado; Tamara Hudgins, Girlstart, Austin, Texas; Kyrie Kellett, Oregon Museum of Science and Industry, Portland, Oregon; and Jan Luth, Exploration Place, The Sedgwick County Science and Discovery Center, Wichita, Kansas
EDUCATION AND PROGRAMMING
Responding to Next Generation Science
Convention Center, Executive Ballroom 210A
Curious about how informal science educators are incorporating new science standards into their program practice? Unsure how to prepare your own staff to make sense of these new documents? Hear stories from six science centers about their work with “Next Generation Science” and engage in a related discussion.

Session Leader: Lesley Kennedy, Manager, Teacher Professional Development, Museum of Science, Boston, Massachusetts


COMMUNITY ENGAGEMENT AND OUTREACH
Broadening Reach by Empowering Youth and Their Community—Reach ‘Em Where They’re At
Convention Center, Executive Ballroom 210E
The entrepreneurial spirit is cultivated through creative expression and leadership. Teens are not only capable of building interesting and creative programs, they are best suited to lead those efforts at large scales. Come learn how to empower teens to reach new audiences and build entrepreneurial skills that achieve national impacts.

Session Leader: Michelle Hall, President, Science Education Solutions, Los Alamos, New Mexico

Session Moderator: Michelle Hall, President, Science Education Solutions, Los Alamos, New Mexico

Presenters: Neal Ramus, California Academy of Sciences, San Francisco, California; Kathryn Rende, North Carolina Museum of Natural Sciences, Raleigh, North Carolina; Satvik Narasimhan, Institute for Science Education New Mexico, San Jose, California; and Vedant Sathye, Institute for Science Education New Mexico, San Jose, California

LEADERSHIP
The Leadership System: Leadership, Followership and Context
Convention Center, Meeting Room 212AB
In our preoccupation with becoming positional leaders, we often overlook opportunities to exercise leadership from wherever we are. Come join us on an exploration of followership (yes, followership). This session will help us think deeply about the leadership system and followership strategies that are essential in navigating your organization and career.

Session Leader: Margaret Glass, Director, Professional Development, Association of Science-Technology Centers, Washington, D.C.

Session Moderator: Julie Johnson, Co-Founder and Owner, 2R2 Leadership & Change Associates LLC, Alexandria, Virginia

Presenters: Cheronda Frazier, Center for Aquatic Sciences at Adventure Aquarium, Camden, New Jersey; Jennifer Martin, TELUS Spark, Calgary, Alberta, Canada; Joanna Haas, Kentucky Science Center, Louisville, Kentucky; Kate Bennett, Rochester Museum & Science Center, Rochester, New York; and Preeti Gupta, American Museum of Natural History, New York, New York

STAFF AND WORKFORCE DEVELOPMENT
Build Your Dream Team
Convention Center, Meeting Room 211CD
What’s the best way to hire, train, and support the professional growth of your employees? Whether your staff is comprised of recent college grads, retired teachers, museum lifers, or career changers, join this honest conversation on how to build and sustain a stellar team.

Session Leader: William Elliston, Manager of Prospect Park Zoo, Wildlife Conservation Society, New York, New York

Session Moderator: Laura Herszenhorn, Senior Manager, Science Action Club, California Academy of Sciences, San Francisco, California

APPLICATIONS OF RESEARCH AND EVALUATION

Smart Museums: Novel Technologies for Enhancing Exhibits and Visitor Learning

Convention Center, Executive Ballroom 210C

How are museums using novel technologies, analytics, and responsive exhibits to track users, document learning, and improve visitor experiences? Designers and museum experts share stories from research and evaluation, share data and approaches, and highlight technologies that deepen visitors’ own interactions with exhibits while also carrying out education missions.

Session Leader: Sherry Hsi, Senior Research Scientist, Concord Consortium, Emeryville, California
Session Moderator: Claire Pillsbury, Program Director, Exploratorium, San Francisco, California

POSTER PRESENTATIONS

2:00–3:15 p.m.
Convention Center, Halls 1 & 2

INNOVATIONS IN SCIENCE AND TECHNOLOGY

A Pack to Create the Pack: How Multiple Perspectives Can Inform Digital Game Development

NYSCI’s intention to extend exhibits into classrooms has led to the creation of a digital game, The Pack, that aims to build computational thinking skills through a series of environmental science-inspired challenges. This poster shares the design-based research development story through three lenses—researcher, curriculum developer, and classroom teacher.

Poster Leader: Tara Chudoba, Exhibit & Activity Developer, New York Hall of Science, Queens, New York
Presenter: Amanda Jaksha, New York Hall of Science, Queens, New York

EDUCATION AND PROGRAMMING

Best Practices in Facilitating Engineering Design Challenges

We will discuss effective strategies to use when facilitating engineering design challenges and best practices for culturally responsive facilitation when working with students, their families, or partner organizations. These strategies were collected through developing and implementing a four-year, NSF-funded project aimed at increasing girls’ interest and enjoyment of engineering experiences.

Poster Leader: Amanda Fisher, Curriculum Developer, Oregon Museum of Science and Industry, Portland, Oregon
Presenter: Veronika Nunez, Oregon Museum of Science and Industry, Portland, Oregon
EDUCATION AND PROGRAMMING

**Carnegie STEM Excellence Pathway—Science Center and School Partnerships to Improve STEM**

Join Carnegie Science Center to learn about the Carnegie STEM Excellence Pathway, an Edgy award winning, self-sustaining program that has strengthened school partnerships. This project has been awarded an IMLS National Leadership Grant enabling us to partner with four other science centers and create opportunity for your science center too.

**Poster Leader/Presenter:** Alana Kulesa, Director of Strategic Education Initiatives, Carnegie Science Center, Pittsburgh, Pennsylvania

EDUCATION AND PROGRAMMING

**Code Together: Teaching Computer Science to Teachers and Students**

Intrepid Sea, Air & Space Museum’s Code Together program partners teachers and students to learn computer science. Participants will learn how computer programming can relate to thematic learning, and how partnering students and teachers can expand the realm of professional development for teachers.

**Poster Leader/Presenter:** Julia Orr, Museum Educator, Intrepid Sea, Air & Space Museum, New York, New York

EXHIBITS AND ENVIRONMENTS

**Co-operative Strategies: A Win-Win Partnership between Univercience and Local Authorities**

How can a science center support and boost the cultural strategy of local authorities? A successful partnership, a win-win business model, and a new experience that enables science and heritage to interact together, those are the key words to give rise to a must-see destination.

**Poster Leader/Presenter:** Nathalie Puzenat, Etablissement Public du Palais de la Découverte et de la Cité des Sciences et de l’Industrie—Univercience, Paris, France

EDUCATION AND PROGRAMMING

**Creativity—Cultivating an Essential Skill for Future Entrepreneurs**

In 2010, IBM conducted a survey of 1,500 CEOs in 60 countries across 33 industries. The respondents believed that the most essential attribute to succeed in a fast-paced world was creativity. This poster describes how 87 ASTC-member institutions explicitly included creativity and the research underpinning it into their programming.

**Poster Leader/Presenter:** Lesley Markham, Program Manager, Professional Development Strategic Initiatives, Association of Science-Technology Centers, Washington, D.C.

EXHIBITS AND ENVIRONMENTS

**Exploring Museum Visitors’ Learning and Interaction with an Augmented Circuit Exhibit**

We present a study of an electrical circuit exhibit at the Museum of Science and Industry in Chicago. We compared four different versions of the exhibit consisting of physical components, an interactive tabletop, and an augmented reality display. We were interested in design factors that helped visitors understand current flow.

**Poster Leader/Presenter:** Elham Beheshti, Graduate Research Assistant (Northwestern University), Museum of Science and Industry, Chicago, Illinois

EXHIBITS AND ENVIRONMENTS

**Fear and Fortitude: Harnessing Emotion as an Interpretive Tool in Exhibitions**

Exhibit developers grappled with the “emotional journey” within an exhibition that embraces the disturbing emotions surrounding climate change, to communicate the science and inspire action. We share lessons learned about the role of emotion in exhibitions, for learning science, presenting climate change, and practical tips gleaned from the development process.

**Poster Leader:** Suzanne Perin, Post-Doctoral Researcher, University of Alaska, Fairbanks, Fairbanks, Alaska

**Presenter:** Smirla Ramos-Montanez, Oregon Museum of Science and Industry, Portland, Oregon
EDUCATION AND PROGRAMMING

**From German Dora to the Runway: A Journal of the Maker Mind**
What happened behind the scenes to our makers when they went from paper circuits to the fashion runway? Never before seen data is collected over the course of the school year documenting the development of a young maker. What did the makers learn? What did we learn from the makers?

*Poster Leader/Presenter: John Teuscher, Makerspace Coordinator, Thanksgiving Point, Lehi, Utah*

EDUCATION AND PROGRAMMING

**Inspiring Cultural Empathy in Early Learners through Anthropology**
Teaching cultural anthropology to early learners is an important part of creating empathetic and globally minded citizens. Drawing from multiple types of offerings, this poster will present inspiration for new educational opportunities and an understanding of how to teach cultures other than one’s own in a sensitive and respectful manner.

*Poster Leader: Daniel Zeiger, Discovery Room Program Coordinator, American Museum of Natural History, New York, New York*


EDUCATION AND PROGRAMMING

**Integration of Making and STEM-rich Programs through Community Science Workshops**
The CSW Network mission is to serve underrepresented students in high-need communities with unique and engaging hands-on making and STEM-rich curriculum and programs. Learn how the CSWN integrates STEM and making activities and immerses communities with science, engineering, and environmental education accessible to underrepresented students, vulnerable youth, and English learners.

*Poster Leader: Jerry Valadez, President, Community Science Workshop Network, Sanger, California*

*Presenter: Jose Sandoval, Community Science Workshop Network, Sanger, California*

APPLICATIONS OF RESEARCH AND EVALUATION

**Listening with Respect: Using Innovations in Research Techniques to Add Cultural Diversity to Maker Experiences**
Our three-year, NSF-funded “Making Connections” project used making as a premise for re-thinking the way that the Science Museum of Minnesota engages visitors from communities of color. We will present a case for why diversity matters to making, innovative research techniques, and ways that community voices shaped new making activities.

*Poster Leader: Marjorie Bequette, Director, Evaluation & Research in Learning, Science Museum of Minnesota, St. Paul, Minnesota*


COMMUNITY ENGAGEMENT AND OUTREACH

**Mobile Making: A Program to Broaden Participation in Making**
Educators view making as a means to engage youth in authentic science and technology experiences. However, there is a lack of ethnic, gender, and socioeconomic diversity among makers. We will describe the outcomes, lessons learned, assessment tools, and scalability of a research-based mobile making program targeting youth in underserved communities.

*Poster Leader: Edward Price, Professor of Physics, California State University San Marcos, San Marcos, California*

*Presenters: Charles De Leone, California State University San Marcos, San Marcos, California; Debbie DeRoma, California State University San Marcos, San Marcos, California; and James Marshall, San Diego State University, San Diego, California*
INNOVATIONS IN SCIENCE AND TECHNOLOGY

**NSF is Making a “Quantum Leap”—How Can Science Museums Keep Up?**

“The Quantum Leap” is one of NSF’s “10 big ideas” for future investments, promising revolutionary advances in computing, sensing, and communication. How might museums join together in tackling this startling new frontier of physics, imagination, and engineering? We’ll provide some hints, and designate a time/place for further discussion and brainstorming.

**Poster Leader:** Carol Lynn Alpert, Director, Strategic Projects, Museum of Science, Boston, Massachusetts

**Presenter:** Karine Thate, Museum of Science, Boston, Massachusetts

**EXHIBITS AND ENVIRONMENTS**

**Putting the Scientist in Science Exhibits**

How can we demystify what scientists do and ignite the (citizen) scientist in visitors? Make the scientist part of the exhibit! Compare three approaches to incorporating working scientists and their research into exhibits. Learn about the benefits and barriers found and what made science approachable and exciting to the visitor.

**Poster Leader/Presenter:** Tammy Stern, Exhibit Developer, North Carolina Museum of Natural Sciences, Raleigh, North Carolina

**EDUCATION AND PROGRAMMING**

**SciGirls CONNECT! Results from a National, Five-year, Gender-equitable STEM Program**

SciGirls CONNECT is a five-year, NSF-funded project that brought research-based, gender-equitable teaching strategies to nearly 200 STEM education programs around the country using a unique training model for capacity building. Significant findings from more than 150 educator trainings will be shared with the ASTC community to inform future projects.

**Poster Leader/Presenter:** Sarah Carter, Manager, STEM Media & Education, Twin Cities PBS, St. Paul, Minnesota

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**EXHIBITS AND ENVIRONMENTS**

**Science, Technology, and the Humanities: Grants from the National Endowment for the Humanities**

NEH offers grants of interest to science centers, natural history museums, and other informal STEM learning institutions. Learn about NEH programs supporting digital projects, public programming, and exhibitions. The poster session will feature the Exploratorium, currently developing an exciting NEH-supported app called Buried Ships and the San Francisco Coastline.

**Poster Leader:** Peter Fristedt, Senior Program Officer, Division of Public Programs, National Endowment for the Humanities, Washington, D.C.

**Presenter:** Rob Rothfarb, Exploratorium, San Francisco, California

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**EDUCATION AND PROGRAMMING**

**Science City’s STEAM Team: Engaging Kids and Families in Three Minutes or Fewer**

Science City’s STEAM Team encourages excitement about STEAM in biweekly TV segments. Each segment must be visually interesting, try-at-home friendly, and presented in fewer than three minutes on live TV! This poster addresses the challenges of balancing these requirements and includes successful hands-on examples.

**Poster Leader:** Heather Edvenson, Education Supervisor, Science City at Union Station, Kansas City, Missouri

**Presenter:** Becky Lindsay, Science City at Union Station, Kansas City, Missouri
EDUCATION AND PROGRAMMING

Successful STEAM: Designing Art-Science Activities with Equity and Access in Mind
A STEAM approach to science holds promise for engaging diverse learners, but it can be hard to design activities that do the job. We developed STEAM design principles that deeply integrate art and science practices with identity building strategies. Come learn about our approach and how you can use it!

Poster Leader: Laura Conner, Research Assistant Professor, University of Alaska Fairbanks, Fairbanks, Alaska
Presenters: Stephen Pompea, National Optical Astronomy Observatory, Tucson, Arizona; Carrie Tzou, University of Washington Bothell, Bothell, Washington; Mareca Guthrie, University of Alaska Museum of the North, Fairbanks, Alaska; and Blakely Tsurusaki, University of Washington, Bothell, Bothell, Washington

IMMERSIVE MEDIA AND EXPERIENCES

Using 360° Videos to Go behind the Scenes with Scientists
In Summer 2016, the Museum of Life and Science shot 360° videos on a research cruise in Bermuda. We used the Ricoh Theta 360 camera and ThingLink software to create virtual reality experiences where visitors travel through different scenes, interact with objects, and complete challenges.

Poster Leader: Trish Lemm, Manager for Innovation and Learning, Museum of Life and Science, Durham, North Carolina
Presenter: Karyn Perdue, Museum of Life and Science, Durham, North Carolina

COMMUNITY ENGAGEMENT AND OUTREACH

Teen SciCafe, Evaluation, and the Human Microbiome
Are you doing, or thinking of doing, Teen SciCafes? Focused on topics related to human health and the microbiome, findings on students’ motivations to attend, impact on their perceptions of scientists, gains in knowledge, and intent to behave will be presented from the American Museum of Natural History’s model.

Poster Leader/Presenter: Leah Golubchick, After School Program Coordinator, American Museum of Natural History, New York City, New York
LEADERSHIP

Science Center, Children’s Museum, or Both? CEOs Debate

Convention Center, Executive Ballroom 210D

Leaders from across the field will debate how, and if, science centers are fundamentally different from children’s museums. Studies show that science center youth visitors are younger than the target demographics of many institutions. How do leaders reconcile that? What can we learn from children’s museums and hybrid institutions?

Session Leader: Lath Carlson, Executive Director, Living Computer Museum, Seattle, Washington
Session Moderator: Lath Carlson, Executive Director, Living Computer Museum, Seattle, Washington
Presenters: Marilee Jennings, Children’s Discovery Museum of San Jose, San Jose, California; Tim Ritchie, The Tech Museum of Innovation, San Jose, California; Kim Herlev, Experimentarium, Hellerup, Denmark; and Jennifer Martin, TELUS Spark, Calgary, Alberta, Canada

COMMUNITY ENGAGEMENT AND OUTREACH

CHISPA Cafecito: Lessons Learned About Building Relationships Between Science Museums and Local Hispanic Community Organizations

Convention Center, Executive Ballroom 210F

Hispanics are the youngest major racial/ethnic group in the United States. About one-third (17.9 million) are under 18. Learn about opportunities and challenges encountered by a network of science centers and Hispanic advocacy organizations working to increase engagement of Hispanic children and families with science, and contribute your experiences.

Session Leader: Cheryl Juarez, Senior Director of Professional Development, Phillip and Patricia Frost Museum of Science, Miami, Florida
Session Moderator: Cheryl Juarez, Senior Director of Professional Development, Phillip and Patricia Frost Museum of Science, Miami, Florida

LEADERSHIP

Responding to Tragedy in Your Community: The Role Museums Can Play

Convention Center, Meeting Room 211AB

Given events that continue to take place around the globe, what role can museums play in responding to local and national tragedies? How can museums start the conversation around inclusion and equity? Can museums be sites of healing? What role can and should we play in public discussions and education?

Session Leader: JoAnn Neuman, President and CEO, Orlando Science Center, Orlando, Florida
Presenters: Catherine Horne, Discovery Place, Inc., Charlotte, North Carolina; Alison Brown, Science Museum of Minnesota, St. Paul, Minnesota; and Frederic Bertley, COSI, Columbus, Ohio

LEADERSHIP

Changing the Field: Impacts from ASTC’s Diversity and Leadership Development Fellows Program

Convention Center, Meeting Room 212AB

What are the long-term impacts of ASTC’s Diversity and Leadership Development Fellows program? Why should you encourage your staff to apply for the program? Meet Fellows from across its 16 cohorts and learn how participation has shaped these individuals into leaders, advocates, and change agents for their institutions, communities, and the science center field.

Session Leader: Joey Rodriguez, Manager of Community Engagement, Center for Aquatic Sciences at Adventure Aquarium, Camden, New Jersey
Session Moderator: Ann Hernandez, Program Manager, Professional Development, Association of Science-Technology Centers, Washington, D.C.
Presenters: Tifferney White, Discovery Children’s Museum, Las Vegas, Nevada; Marcos Stafne, Montshire Museum of Science, Norwich, Vermont; Azuka MuMin, COSI, Columbus, Ohio; Priya Mohabir, New York Hall of Science, Queens, New York; and Ka’iu Kimura, ‘Imiloa Astronomy Center of Hawai‘i, Hilo, Hawai‘i
STAFF AND WORKFORCE DEVELOPMENT

The Best Professional Development Activities Ever: How to Enrich Your Early Childhood Education Professional Development Offerings

Convention Center, Meeting Room 211CD

In this interactive session presenters will lead participants through the most successful ECE professional development activity they’ve ever facilitated with their organization’s staff, interns, or volunteers. Expect to experience, discuss, brainstorm, and walk away with fresh ideas about how to enrich your organization’s professional development approach to early childhood education.

Session Leader: Maureen Weinhardt, Education Manager, Children’s Creativity Museum, San Francisco, California

Presenters: Janna Doherty, Museum of Science, Boston, Massachusetts; and Renee Harmon, Science Center of Iowa & Blank IMAX Dome Theater, Des Moines, Iowa

ADMINISTRATION

Collaborating Outside to Renew Inside

Convention Center, Meeting Room 212C

Four science centers from Europe and North America illustrate their step-by-step outcomes of collaboration, which disrupt and inform their typically anticipated exhibition design and production processes. Comparison of points of view or of different kinds of collaboration with input added from session attendees will allow the group to build a collaboration chart together.

Session Leader: Nathalie Puzenat, Project Manager, Etablissement Public du Palais de la Découverte et de la Cité des Sciences et de l’Industrie—Universcience, Paris, France

Session Moderator: Mikko Myllykoski, Experience Director, Heureka, the Finnish Science Centre, Helsinki, Finland

Presenters: Alexander Fucikovsky, Universum/DGDC-UNAM, Mexico City, Mexico; Mikko Myllykoski, Heureka, the Finnish Science Centre, Vantaa, Finland; and Sharon Stulberg, American Museum of Natural History, New York, New York

EXTENDED SESSIONS

4:30–6:30 p.m.

APPLICATIONS OF RESEARCH AND EVALUATION

Walk a Mile in My Shoes: Science Centers as Bridges to Empathy and Social Change

Convention Center, Executive Ballroom 210B

As today’s global challenges increase in complexity, museums are uniquely equipped to serve as “empathy laboratories” that foster socioemotional development and collaborative problem-solving. Come participate in interactive case studies and reflective activities facilitated from neuroscientific, psychological, and educational perspectives. What role should museums play in developing self-awareness and social understanding?

Session Leader: Debbie Cockerham, Managing Director, Research and Learning Center, Fort Worth Museum of Science and History, Fort Worth, Texas

Presenters: Orna Cohen, Dialogue Social Enterprises, Hamburg, Germany; Troy Livingston, ExposeYourMuseum, Denver, Colorado; Erik Jahner, University of California, Riverside, Riverside, California; and Elif Gokcigdem, Empathy-Building Through Museums Initiative, Washington, D.C.

DEVELOPMENT AND MEMBER RELATIONS

It’s All about Evaluation! For Development and Other Non-evaluation Professionals

Convention Center, Executive Ballroom 210A

This interactive workshop session will provide evaluation techniques for science center professionals who don’t have professional evaluators, those developing grant proposals, and for development people who will benefit from learning simple evaluation strategies. Facilitators will guide discussion and creation of logic models, surveys and focus groups, data analysis, accountability, and needs assessment.

Session Leader: Terry Billie, Development Manager, Museum of Life and Science, Durham, North Carolina

Presenters: Elsa Bailey, Elsa Bailey Consulting, San Francisco, California; Carlyn Buckler, Cooperstown Graduate Program for Museum Studies, SUNY, Cooperstown, New York; Jennifer Rickards, Montshire Museum of Science, Norwich, Vermont; and Tim Sears, Adventure Science Center, Nashville, Tennessee
EDUCATION AND PROGRAMMING

Wicked Problems: Opportunities for the Science Museum Community to Address Society’s Biggest Challenges

Convention Center, Executive Ballroom 210G

Science centers and other cultural institutions have played a central role in helping enlighten the public about society’s wicked problems. This session invites panelists, representing institutions across the nation, to discuss efforts to address these problems: what works and what doesn’t, and the challenges and opportunities going forward.

Session Leader: Stephen Uzzo, Chief Scientist, New York Hall of Science, Queens, New York

Presenters: Pat Hamilton, Science Museum of Minnesota, St. Paul, Minnesota; Eric Siegel, UC Botanical Garden at Berkeley, Berkeley, California; Becca Hatheway, University Center for Atmospheric Research, Boulder, Colorado; David Sittenfield, Museum of Science, Boston, Massachusetts; and Miranda Massie, The Climate Museum, New York, New York

EXHIBITS AND ENVIRONMENTS

Designing for Tinkerability: Are We Trying to Create Digestible Facts or Support Meaningful Discovery?

Convention Center, Executive Ballroom 210E

Could designing for “tinkerability” unlock new possibilities for engaging visitors in meaningful ways? Thinking about ways that design of activities and spaces can broaden participation and foster innovation is the goal for this session. We’ll examine six different approaches to this question and brainstorm possibilities with session attendees.

Session Leader: Karen Wilkinson, Tinkering Studio Director, Exploratorium, San Francisco, California

Presenters: Brigette Belleville, Montréal Science Centre, Montreal, Quebec, Canada; David Wells, New York Hall of Science, Queens, New York; Monika Mayer, Laurence Hall of Science, Berkeley, California; Maria Mortati, Mortati and Friends, San Francisco, California; and Sherlock Terry, Montshire Museum of Science, Norwich, Vermont

6:00 – 7:00 p.m.

Reflecting on Practice Meet-up

Marriott, Blossom Hill III

An informal gathering for anyone curious about the Reflecting on Practice (RoP) program, alumni of RoP, those currently participating in RoP, and those facilitating and championing the program. Bring your friends. Share your stories.

7:30–11:30 p.m.

Only in Silicon Valley!

Saturday Night Party at the Tech Museum of Innovation

Enjoy an evening in the Tech Museum, where the latest in Silicon Valley innovations are showcased to inspire the innovator in everyone! Explore, experiment, create, and challenge yourself to do more with technology while meeting old and new friends. Visit the new Reboot Reality gallery to play and create with virtual reality and augmented reality; step into the role of a cyber sleuth in Cyber Detectives; explore the human body inside and out; or design, build and program a robot. Experience creative cuisine and innovative dishes, get your 3D printed chocolate, and watch out for some Silicon Valley surprises! Relax, connect, and enjoy with music, rooftop stargazing, and more. Join the fun just steps away from the convention center.

For guests ages 18 and over. Preregistration required. Event fee: $12 (supports the ASTC Diversity and Leadership Development Fellows program).
Welcome from The Tech Museum of Innovation and our Bay Area ASTC colleagues!

Bay Area Discovery Museum  
Chabot Space & Science Center  
Children's Creativity Museum  
Children's Discovery Museum of San Jose  
Computer History Museum  
CuriOdyssey  
Exploratorium  
Lawrence Hall of Science  
Lick Observatory  
Lindsay Wildlife Experience  
Oakland Museum of California

Please join us at The Tech on Saturday night for an unforgettable evening to celebrate the power of ASTC organizations to build a bright, sustainable and equitable future!

Special thanks to:  

**Gordon and Betty Moore Foundation**  
Google  
Tessitura Network  
Event Network
According to a survey* of Congressional staff, the overwhelming response is “in-person visits from constituents.”

That’s why Museums Advocacy Day is more important than ever.

ASTC is pleased to join the American Alliance of Museums as a key cosponsor of this event. ASTC members register for FREE.

Save the date and plan to join us for the 10th annual Museums Advocacy Day, February 26-27, 2018 in Washington, DC to make the case for federal funding (including IMLS, NEH, NEA, and STEM Education), the charitable deduction, and other policies that support museums.

To see a complete list of partnering organizations, or to lend your museum’s support, visit aam-us.org/advocacy/museums-advocacy-day/support.

*Congressional Management Foundation, 2017, Citizen-Centric Advocacy: The Untapped Power of Constituent Engagement
### SUNDAY, OCTOBER 22

**7:00 a.m.–5:00 p.m.**

**Registration Open**  
*Convention Center, Concourse Level Prefunction*

**8:30–9:15 a.m.**

**The Distributed ASTC Conference: The History of the Relationship between Science and Truth**  
*Convention Center, Grand Ballroom 220*  
In a new session format, join a live conversation with Ismail Serageldin, founding director emeritus of the Library of Alexandria in Egypt, that will be simulcast in San Jose and four science centers in the Middle East. Be there with all these session attendees in all these cities for an exploration of how truth and science have intersected and diverged over time.

**8:30–9:00 a.m.**

**Sponsor/Exhibitor Appreciation Breakfast**  
*Convention Center, Halls 1 & 2*  
ASTC 2017 exhibitors and sponsors are cordially invited to the annual appreciation breakfast. We want to let our partners know how much we appreciate their work on behalf of the science center field, and we look forward to speaking with them.  
Open to exhibitors and sponsors only.  
Preregistration required.

**9:00 a.m.–6:00 p.m.**

**Exhibit Hall Open**  
*Convention Center, Halls 1 & 2*  
Open to all registered attendees.

**10:15–11:30 a.m.**

**COMMUNITY ENGAGEMENT AND OUTREACH**  
**STEM Community Partnerships: Strategies and Resources for Developing Collaborations and Reaching New Audiences**  
*Convention Center, Executive Ballroom 210H*  
This session presents strategies, ready-to-use resources, and case studies of successful museum-community partnerships, focusing on mutually beneficial collaborations to reach underserved audiences. Presenters will share products, stories, and evaluation results from a national project, Museum and Community Partnerships, implemented in 100 communities across the United States, and facilitate audience discussion.  
**Session Leader:** Rae Ostman, Director, NISE Network, Science Museum of Minnesota, St. Paul, Minnesota  
**Session Moderator:** Rae Ostman, Director, NISE Network, Science Museum of Minnesota, St. Paul, Minnesota  
**Presenters:** Brad Herring, Museum of Life and Science, Durham, North Carolina; Ali Jackson, Sciencenter, Ithaca, New York; Catherine McCarthy, Science Museum of Minnesota, St. Paul, Minnesota; Keith Ostfeld, Children’s Museum of Houston, Houston, Texas; and Elizabeth Kollmann, Museum of Science, Boston, Massachusetts

**9:00–10:00 a.m.**

**Beverage Break**  
*Convention Center, Halls 1 & 2*  
Come have a beverage on us.

**World Biotech Tour: 2015–2017 Meeting**  
*Marriott, Almaden*  
World Biotech Tour (WBT) host museums from 2015–2017 meet to discuss project results and feedback. Project leaders and Miraikan museum staff will share details about the WBT program at the 2017 Science Centre World Summit in Tokyo.  
By invitation only (2015–2017 WBT science centers).
LEADERSHIP

Enacting Norms—Complexity, Simplicity, and Relationship

Convention Center, Meeting Room 212C

Norms help us share diverse perspectives, yet even as we bridge differences, misunderstanding arises. How do we practice norms? What helps us be present and humble? This session will employ several innovative facilitation strategies to powerfully engage each attendee in listening and speaking to address complex problems and build community.

Session Leader: Liesl Chatman, Director, Science House Professional Development Group, Science Museum of Minnesota, St. Paul, Minnesota

Presenters: Kellen Nixon, Discovery Place, Inc., Charlotte, North Carolina; Becky Menlove, Natural History Museum of Utah, Salt Lake City, Utah; Tamara Grybko, Explora, Albuquerque, New Mexico; Brian Berry, Oregon Museum of Science and Industry, Portland, Oregon; and Laurie Giarratani, Carnegie Museum of Natural History, Pittsburgh, Pennsylvania

EDUCATION AND PROGRAMMING

Vending Machines, Trucks, and Tweets: Entrepreneurial Extensions to Museum Experiences

Convention Center, Meeting Room 212AB

As making spaces pop up in museums, new educational programs can result in entrepreneurial experiments, including tinkering trucks, vending machines, and websites. In this hands-on session, leaders from a variety of science centers big and small will share successes and failures for extending learning beyond the walls of the museum.

Session Leader: Ryan Jenkins, Co-founder, Educator, Wonderful Idea Company, El Cerrito, California


EDUCATION AND PROGRAMMING

Extreme Event: Using Role-playing Games to Build Community Disaster Resilience

Convention Center, Meeting Room 211CD

In 2015, the Science Museum of Virginia received a grant for programming about community disaster resilience. In order to encourage participants to think about resilience, the museum used Koshland Science Museum’s Extreme Event game. Join us to hear more about their success and experience the live-action role-playing game for yourself!

Session Leader: Keri Stoever, Public Programs Manager, Koshland Science Museum, Washington, D.C.


DEVELOPMENT AND MEMBER RELATIONS

Happy Donors and Less-stressed Staff: Effective Partnerships between Development and Programs

Convention Center, Executive Ballroom 210D

How can program staff be better fundraisers? How can development staff support programmatic priorities and operations? Program delivery and development are different fields requiring unique skills and knowledge, but both are essential. Learn to effectively partner with your program and development counterparts and receive resources with best practices and tips.

Session Leader: Neal Ramus, Senior Manager of Youth Programs, California Academy of Sciences, San Francisco, California

Presenters: Beverly Cherner, California Academy of Sciences, San Francisco, California; Michelle Kortenaar, Sciencenter, Ithaca, New York; Monika Collins, Sciencenter, Ithaca, New York; Massimo Pacchione, Bay Area Discovery Museum, Sausalito, California; and Brandy Vause, Bay Area Discovery Museum, Sausalito, California
IMMERSIVE MEDIA AND EXPERIENCES

Immersive Visualizations Using NASA Data: Resources, Tools, and Techniques

Convention Center, Executive Ballroom 210C

Immersive visualizations of NASA data from spacecraft studying Earth and a wide range of other worlds engage and inspire our audiences. This session will showcase how to obtain and use NASA data products and leading-edge tools to produce spectacular immersive experiences in your planetarium, large-format theater, or other venue.

Session Leader: Brian Day, Lunar and Planetary Mapping and Modeling Project Manager, NASA Ames Research Center, Moffett Field, California

Session Moderator: Brian Day, Lunar and Planetary Mapping and Modeling Project Manager, NASA Ames Research Center, Moffett Field, California

Presenters: Ryan Wyatt, California Academy of Sciences, San Francisco, California; Emily Law, Jet Propulsion Laboratory, Pasadena, California; and Carter Emmart, American Museum of Natural History, New York, New York

EDUCATION AND PROGRAMMING

Adults in the Wild—Engaging Adult Audiences with Off-campus Events

Convention Center, Executive Ballroom 210A

Think outside of your four walls. Learn about a variety of approaches to adult engagement off-campus—maker events and science talks at bars, adult events with partners, and more. Discuss why and how to start programs like these, and how they can benefit your museum’s mission in unique ways.

Session Leader: Molly Brown, Fundraising Events Associate, Museum of Life and Science, Durham, North Carolina


APPLICATIONS OF RESEARCH AND EVALUATION

Sharing Is C(omp)aring: Using and Applying Comparative Visitor Data within and across Our Institutions

Convention Center, Executive Ballroom 210E

Have you ever compared—or wished you could compare—your visitor data to other institutions? What would you do if you could? In this session, participants will hear from a panel of museum leaders about using comparative visitor data, guided by real-world examples from a collaborative study involving 13 science centers.

Session Leader: Alexander Lussenhop, Senior Research and Evaluation Assistant, Museum of Science, Boston, Massachusetts

Session Moderator: Alexander Lussenhop, Senior Research and Evaluation Assistant, Museum of Science, Boston, Massachusetts

Presenters: Bert Vescolani, Saint Louis Science Center, St. Louis, Missouri; Margaret Honey, New York Hall of Science, Queens, New York; Megan Pratt, The Pensacola MESS Hall, Pensacola, Florida; and Christine Reich, Museum of Science, Boston, Massachusetts

EDUCATION AND PROGRAMMING

The Power of Narrative

Convention Center, Executive Ballroom 210B

Join us for a hands-on exploration and reflective discussion around how to infuse your programs, activities, and institution with narrative-driven experiences. Learn what critical components make narrative-driven activities successful for all ages, and the practical strategies and tools for adding narrative elements to your curricula, programs, and exhibits.

Session Leader: Amy Wiggin, Camp Manager, Thinkery, Austin, Texas

Presenters: Dorothy Bennett, New York Hall of Science, Queens, New York; Sarabeth Gordon, The Pensacola MESS Hall, Pensacola, Florida; Anika Taylor, The Bakken Library and Museum, Minneapolis, Minnesota; Emily Cotman, Sciencenter, Ithaca, New York; Alyson Walker, Arizona Science Center, Phoenix, Arizona; and Dr. Valerie Knight-Williams, Knight Williams Research Inc., Sacramento, California
EDUCATION AND PROGRAMMING

Where the Rubber Meets the Road: Connecting Research with Practice in Understanding How Children Learn

Convention Center, Meeting Room 211AB

What strategies can museums and science centers employ to effectively communicate current research findings about child development with parents and educators? In this session we’ll explore four different case studies that focus on innovative approaches to finding, integrating, and sharing essential information about how children learn.

Session Leader: Maureen Weinhardt, Education Manager, Children’s Creativity Museum, San Francisco, California

Presenters: Robert Firmhofer, Copernicus Science Center, Warsaw, Poland; Becki Kipling, Museum of Science, Boston, Massachusetts; and Elizabeth Rood, Bay Area Discovery Museum, Sausalito, California

COMMUNITY ENGAGEMENT AND OUTREACH

Decentralizing the Museum: Science Clubs as Community Partners

Convention Center, Executive Ballroom 210F

Science clubs are community-centered programs where participants freely and directly engage with science in their own neighborhoods. These highly localized experiences are popping up around the United States, representing a new, decentralized model for museums. Join an interactive discussion that will examine successful science clubs and explore strategies for replicating them.

Session Leader: Benjamin Dickow, President and Executive Director, Columbia Memorial Space Center, Downey, California

Presenters: Laurel Robinson, Natural History Museum of Los Angeles County/Page Museum at the La Brea Tar Pits, Los Angeles, California; and Aaron Price, Museum of Science and Industry, Chicago, Illinois

POSTER PRESENTATIONS

10:15–11:30 a.m.

Convention Center, Halls 1 & 2

EDUCATION AND PROGRAMMING

A (Tech)Quest into New Territory: Onsite Gaming at the National Air and Space Museum

In early 2014, educators at the National Air and Space Museum’s Steven F. Udvar-Hazy Center were tasked with building a new educational program, an alternate-reality game, targeting late elementary and middle school students. Lessons learned and positive feedback abound as we enter our fourth and final version of the game.

Poster Leader: Shannon Baldioli, Explainers Program Coordinator, National Air and Space Museum, Washington, D.C.

Presenter: Doug Baldwin, National Air and Space Museum, Washington, D.C.

APPLICATIONS OF RESEARCH AND EVALUATION

ActApp: A Toolkit for Evaluating the Impact of STEM Learning

We have developed an online toolkit (ActApp) designed to support evaluation of STEM learning experiences for youth. ActApp offers a set of validated, easy-to-administer survey and observation instruments that measure key outcomes of STEM learning. The instruments can be used by seasoned researchers, by program leaders who have never evaluated their programs before, or anyone in between.

Poster Leader: Kalie Sacco, Research Associate & Coordinator of Special Initiatives, Lawrence Hall of Science, Berkeley, California

Presenter: Rena Dorph, Lawrence Hall of Science, Berkeley, California
IMMERSIVE MEDIA AND EXPERIENCES

Collaborative Navigation: Reaching New Horizons with a CyberCANOE’s Visualization Capabilities

Transforming information to be public-interfacing has allowed unique conversations to take place in our museum. Working with researchers and their data visualization lab, CyberCANOE, introduces users to a unique perspective on how to present their data. In this session, we will cover the technological and developmental challenges of these efforts.

Poster Leader: Ka‘iu Kimura, Executive Director, ‘Imiloa Astronomy Center of Hawai‘i, Hilo, Hawai‘i


APPLICATIONS OF RESEARCH AND EVALUATION

Beyond Science Centers: Examining Public Engagement across the Field of Informal Science Education

This study used the Portal to the Public Network, a community focused on scientist-public engagement, to examine public engagement across several types of institutions in the informal science education field. What are the unique contexts and needs of these different institutions, and what can we learn from each other?

Poster Leader/Presenter: Anna Johnson, Portal to the Public Project Specialist, Pacific Science Center, Seattle, Washington

APPLICATIONS OF RESEARCH AND EVALUATION

Bridging Informal STEM Learning and Science Communication

The Center for Advancement of Informal Science Education (CAISE) was recently awarded a new, five-year grant from NSF to bridge the informal STEM learning and science communication communities. CAISE will convene task forces around three areas of traction: broadening participation, connecting research and practice, and evaluation and measurement.

Poster Leader/Presenter: Grace Troxel, Digital Librarian, CAISE, Washington, D.C.

COMMUNITY ENGAGEMENT AND OUTREACH

Creating Accessible Makerspaces at Museums and Colleges with Soaring Socks: A Catapult Tinkering Challenge

How do we create accessible makerspaces? Explore tinkering with catapults. Discover ways to engage a diverse population of students in creativity and innovation. Facilitate accessible STEAM learning experiences. Find out how this exhibit was received at the Montshire Museum of Science in Vermont and Mount Holyoke College in Massachusetts.

Poster Leader/Presenter: Lila Teenyanoff, Student, Mount Holyoke College, South Hadley, Massachusetts
EXHIBITS AND ENVIRONMENTS

Effect of Traveling Exhibitions on Visitor Intent to Engage in Return Visits
During a 10-month study involving three different traveling exhibits, COSI identified factors that influence visitors’ intention to make return visits to COSI. This poster will examine the relationships between the factors that were identified and the perceived value of traveling exhibitions’ impact on visitor repeat attendance.

Poster Leader/Presenter: Rita Deedrick, Director, Center for Research & Evaluation, COSI, Columbus, Ohio

COMMUNITY ENGAGEMENT AND OUTREACH

Exhibit Lessons for Kids by Kids: Incorporating the Public School System into Expansion Projects
Through a partnership with the local public school system, 50 middle-school students step through the exhibit design and program process to incorporate physical science concepts into the development of our future Science Park. Students create age-appropriate lessons and activities that support the exhibits for future school field trips.

Poster Leader/Presenter: Summer Scarlatelli, STEM Center for Education and Career Development Manager, Museum of Discovery and Science, Ft. Lauderdale, Florida

COMMUNITY ENGAGEMENT AND OUTREACH

The Expanding Universe of Astronomy on Tap Public Outreach Events
Astronomy on Tap is an international series of (mostly) free outreach events held mainly at bars. Rooted in ISI and FCL practices of informal engagement, we connect to nontraditional audiences through games, prizes, and science in a fun, low-pressure environment that encourages a lively science conversation.

Poster Leader: Sean McLaughlin, Graduate Student, Stanford University, Palo Alto, California
Presenters: Brian Levine, Astronomy on Tap, Brooklyn, New York; Jeffrey Silverman, Astronomy on Tap, San Francisco, California; and Sophia Skouroski, Eastbay Astronomical Society, Oakland, California

EDUCATION AND PROGRAMMING

Exploring the Arctic—Families and Climate Change
How do you make public activities about climate change hands-on and age appropriate? The Montshire Museum of Science has developed explainer programs that help young families have their first conversations about climate change. These programs use maps, globes, and satellite apps to explore the changing Arctic in a family-friendly way.

Poster Leader/Presenter: Rebecca Haynes, Science Educator, Head Explainer, Montshire Museum of Science, Norwich, Vermont

Focus Field Trip: A New Model for Engaging School Groups
In Fall 2016, the Museum of Life and Science revamped its field trip experience. We’ll discuss how we designed an event that increased school group visitation while simultaneously focusing on students’ learning in the museum. We’ll reflect on how to integrate school system goals while preserving your institution’s values.

Poster Leader/Presenter: Melissa Russell, Program Manager: School Programs, Museum of Life and Science, Durham, North Carolina

Free Hands-on STEM Resources
Spark STEM excitement in your center using Girlstart’s free online resources. Participants will walk away with hands-on STEM activities that can be used to engage, introduce, and/or expand STEM learning for kids and families throughout the year. From meaningful afterschool curriculum to a spooky STEM extravaganza, there is something for everyone!

Poster Leader: Katelyn Wamsted, Director of Programs, Girlstart, Austin, Texas
Presenter: Kristi Eschberger, Girlstart, Austin, Texas
APPLICATIONS OF RESEARCH AND EVALUATION

Is One More Successful than the Other?
Comparing Evaluation Findings across Various Project Components

Beyond Spaceship Earth uses exhibit interactives, first-person interpretation, engineering workshops, and a space-object theater to develop interest and positive attitudes toward STEM topics and human space exploration. The evaluation findings from this project provide an opportunity to compare the affordances and relative successes of different formats for content delivery.

Poster Leader/Presenter: Claire Thoma Emmons, Research & Evaluation Associate, The Children’s Museum Indianapolis, Indianapolis, Indiana

COMMUNITY ENGAGEMENT AND OUTREACH

Meaningful Community Collaborations

We share community-based participatory research results of 30 community-based organizations representing culturally diverse communities across the United States. The research explores the role of collaborations between underserved communities and STEM institutions. We uncover barriers and opportunities for achieving real impact in practice and include tangible applications.

Poster Leader/Presenter: Rick Bonney, Director, Public Engagement in Science, Cornell Lab of Ornithology, Ithaca, New York

COMMUNITY ENGAGEMENT AND OUTREACH

Museums’ Beliefs about Diversity

This poster presents the results of an in-depth interview study on museum workers’ beliefs about diversity and their pedagogical practices when designing exhibitions and educational programs for culturally and linguistically diverse communities.

Poster Leader/Presenter: Krystal Villanosa, Doctoral Candidate, Northwestern University, Chicago, Illinois

COMMUNITY ENGAGEMENT AND OUTREACH

NASA Resources for You!

NASA drives advances in science, technology, aeronautics, and space exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of the Earth. What innovations and discoveries will NASA make next, and how can science museums and centers work collaboratively with NASA Education and other organizations to engage your visitors and community?

Poster Leader: Beverly Girten, Director, Institutional Engagement, National Aeronautics and Space Administration (NASA), Washington, D.C.

Presenters: Amelia Chapman, Jet Propulsion Laboratory, Los Angeles, California, and Leslie Lowes, Jet Propulsion Laboratory, Pasadena, California

COMMUNITY ENGAGEMENT AND OUTREACH

“Now I’m More Excited”—Pursuing STEM Pathways after a Science Festival

The Sitka Sound Science Center initiated a program bringing lower-division rural and Native undergraduates to a science festival. We share practical lessons for bridging community college and informal education settings, making “becoming a scientist” seem attainable in just a weekend, and tips for cultivating peer-mentoring programs in informal settings.

Poster Leader: Suzanne Perin, Evaluator & Learning Researcher, Perin Consulting, Fairbanks, Alaska

Presenter: Lisa Busch, Sitka Sound Science Center, Sitka, Alaska

EDUCATION AND PROGRAMMING

Parent-child Collaborative Investigation during Family Science Night Events

It is assumed that “family science night” events are useful to school communities, but how can the impact of this programming be measured? Learn how one museum took a group inquiry strategy designed for exhibit interaction and applied it to family programming in local schools.

Poster Leader/Presenter: Samantha Blau, External Programs Manager, Maryland Science Center, Baltimore, Maryland
COMMUNITY ENGAGEMENT AND OUTREACH
Partnering Effectively with Tech Start-ups for Innovative Visitor Experiences

While there are great opportunities in working with new technology companies for innovative hardware, software, apps, and digital content, there are also challenges. Especially for smaller organizations, it can be difficult to develop win-win partnerships resulting in high-quality visitor experiences. We share our experiences with various companies and projects.

Poster Leader: Tomas Durkin, Exhibits Manager, Children’s Creativity Museum, San Francisco, California
Presenter: Carol Tang, Children’s Creativity Museum, San Francisco, California

APPLICATIONS OF RESEARCH AND EVALUATION
Staying in Science: An Examination of Pathways of Youth Participating in Immersive Science Research Activities

Findings from a longitudinal study will be presented documenting how youths’ social networks develop as they participate in scientific communities of practice, and how that relates to experiences in and after the programs connected to STEM careers. Theoretical frames, methods, and limitations in the study will also be covered.

Poster Leader: Preeti Gupta, Director of Youth Learning and Research, American Museum of Natural History, New York, New York
Presenters: Karen Hammerness, American Museum of Natural History, New York City, New York, and Tim Podkul, Center for Technology in Learning, SRI International, Menlo Park, California

APPLICATIONS OF RESEARCH AND EVALUATION
User-generated and Observed Data at the Hall of Human Life

Come see the results from an evaluation for Hall of Human Life, an exhibition where visitors can use scannable wristbands to track and compare personal data with other visitors. Find out about our results and learn about how we used user-generated data and traditional group observation methods to understand the visitor experience.

Poster Leader/Presenter: Sunewan Chunhasuwan Paneto, Research Assistant, Museum of Science, Boston, Massachusetts
FLASH SESSIONS
Public Engagement with Scientific Methods
10:15–11:30 a.m., Convention Center, Executive Ballroom 210G

Moderator: Paul Orselli, President and Chief Instigator, POW! (Paul Orselli Workshop), Baldwin, New York

Inspiring Effective Public Science Communication at the Edge of New Discoveries
The Harvard Museum of Natural History’s new Science Education Partner program connects the professional experience of museum educators with the science expertise of Harvard University graduate students. We’ll reflect on first-year ups and downs, and encourage participants to start similar partnerships at their institutions with images, activity demos, and resources.

Presenter: Amy Gunzelmann, Harvard Museums of Science and Culture, Cambridge, Massachusetts

Design Stories: Bringing Field Trip Engineering Design Experiences Back to the Classroom
NYSCI will share a use-case study of teachers’ use of Design Stories, an iPad app that invites educators to capture moments of student learning during design and making activities. We will share how teachers used the app to extend their students’ experiences on a field trip into their classrooms.

Presenter: Rose Pozos, New York Hall of Science, Queens, New York

How to Organize a Science Game Jam in 87 Easy-to-Follow Steps
Game Jams are a fun and exciting way to get people engaged around a particular science/environmental issue. The presentation will emulate the frantic, unpredictable, and entertaining nature of game jams. You’ll walk away with everything you need to know to run a successful science game jam.

Presenter: Rik Panganiban, California Academy of Sciences, San Francisco, California

Public Interactions with Scientists: What’s the Impact?
Across the country, the number of science festivals, many led by science centers, is increasing exponentially. A hallmark of science festivals is public interaction with STEM professionals. With data from 24 science festivals (and more than 20,000 surveys), we will share key outcomes of these interactions.

Presenter: Katherine Nielsen, Science & Health Education Partnership, University of California, San Francisco, San Francisco, California

Igniting Inquiry: Kids’ Citizen-Science Observations Spark Authentic Science Investigations
Exploring local habitats, contributing to citizen-science projects, and conducting science investigations are wonderful ways to develop students’ science process skills. Discover ideas and resources for informal educators who wish to support students and teachers in participating in citizen science and science investigations!

Presenter: Jennifer Fee, Cornell Lab of Ornithology, Ithaca, New York

Designing for Data: Creating Interactive Experiences to Boost Data Literacy in the Middle Grades
The Gulf of Maine Research Institute will describe our multi-year effort to design an interactive learning experience focused on data and climate literacy via NASA’s rich earth systems data assets. Come learn how we, along with our partners, are blending experience design and learning research to create compelling data-forward experiences.

Presenter: Jeff Bate, Gulf of Maine Research Institute, Portland, Maine
EDUCATION AND PROGRAMMING

**An Entrepreneurial Pathway for School Partnerships to Improve STEM**

**Convention Center, Meeting Room 212AB**

Come learn from five science centers across the United States how the Carnegie STEM Excellence Pathway provides opportunities for entrepreneurial growth in their organizations. In this dynamic session, you will have an opportunity to speak with education leaders and bring home to your science center a new opportunity for STEM partnerships.

**Session Leader:** Alana Kulesa, Director of Strategic Education Initiatives, Carnegie Science Center, Pittsburgh, Pennsylvania

**Session Moderator:** Alana Kulesa, Director of Strategic Education Initiatives, Carnegie Science Center, Pittsburgh, Pennsylvania

**Presenters:** Alana Kulesa, Carnegie Science Center, Pittsburgh, Pennsylvania; Christian Greer, Saint Louis Science Center, St. Louis, Missouri; Kathleen Lawson, Arkansas Discovery Network, Little Rock, Arkansas; Kellen Nixon, Discovery Place, Inc., Charlotte, North Carolina; and Cathy Barthelemy, Fort Worth Museum of Science and History, Fort Worth, Texas

COMMUNITY ENGAGEMENT AND OUTREACH

**Implementing Sustainable Long-term Collaborations among Science Centers and Schools Worldwide**

**Convention Center, Meeting Room 211AB**

How can science centers and schools develop entrepreneurship environments for school students? Speakers describe long-term, evolving, sustainable projects from around the world, including challenges, implementation methods, successes, failures, and outcomes. Session participants will share their perspectives, concerns, expectations, and innovative ideas combining formal and free choice learning.

**Session Leader:** Erik Jacquemyn, International Consultant, Jacquemyn & Associates, Mechelen, Belgium

**Presenters:** Jennifer Martin, TELUS Spark, Calgary, Alberta, Canada; Noel Jackson, International Centre for Life, Newcastle upon Tyne, United Kingdom; Alemayehu Abera, STEM Synergy Ethiopia, Addis Ababa, Ethiopia; Molly Demeulenaere, Tampa, Florida; John Falk, Oregon State University, Corvallis, Oregon; and Netzach Farbiash, Carasso Science Park, Beer Sheva, Israel

EXHIBITS AND ENVIRONMENTS

**Digitally Challenged—Digital Exhibit Fails & Wins**

**Convention Center, Executive Ballroom 210H**

Who has experienced both great, and not-so-great digital exhibits? What would you do over again? And what would you never do again? This session will share stories from the field on traditional and hybrid digital exhibits, explore hands-on digital interactivities, and see what innovations are on the horizon.

**Session Leader:** Jeff Rosenblatt, Director, Director, Science City at Union Station, Kansas City, Missouri

**Presenters:** Jeff Rosenblatt, Science City at Union Station, Kansas City, Missouri; Dave Patten, Science Museum, London, United Kingdom; Keith Ostfeld, Children’s Museum of Houston, Houston, Texas; and Becky Menlove, Natural History Museum of Utah, Salt Lake City, Utah

APPLICATIONS OF RESEARCH AND EVALUATION

**The Eavesdropping Evaluator: Evaluating Live Conversations on the Floor**

**Convention Center, Executive Ballroom 210G**

Live interpretation is one of the more challenging things to evaluate. In this roundtable discussion, hear about the struggles and tactics panelists use in fine-tuning live interpretation through evaluation results. Bring home insights about evaluation goal setting, instrument design, and how to address the results.

**Session Leader:** Kate Fermoile, Director of Interpretation and Exhibitions, Brooklyn Botanic Garden, Brooklyn, New York

**Session Moderator:** Stephanie Downey, Managing Director, Randi Korn & Associates, Inc., Alexandria, Virginia

**Presenters:** Rachael Matthews, The Children’s Museum of Indianapolis, Indianapolis, Indiana, and Sylvia Algire, Exploratorium, San Francisco, California
EDUCATION AND PROGRAMMING
Roads Taken: Youth Programs Paving the Way for Diversity Mapped by YouthALIVE!

Convention Center, Executive Ballroom 210F
Get involved and contribute ideas for youth programming’s future, building on the successful YouthALIVE! innovation for underserved youth. Hear updates on Roads Taken efforts (shareable database and long-term participant impact research) and learn successful strategies from programs sustained for more than 20 years. Contribute your expertise and questions on long-term impacts.

Session Leader: Carey Tisdal, Director, Tisdal Consulting, St. Louis, Missouri
Session Moderator: Christine Klein, Director, Insight for Learning Practices LLC, Kirkwood, Missouri
Presenters: Carey Tisdal, Tisdal Consulting, St. Louis, Missouri; Amaris Alanis-Ribeiro, Chicago Botanic Garden, Chicago, Illinois; Marcia Bueno, New York Hall of Science, Queens, New York; Priya Mohabir, New York Hall of Science, Queens, New York; and Neal Ramus, California Academy of Sciences, San Francisco, California

EDUCATION AND PROGRAMMING
Finding the Math in Making: Exploring Approaches to Integrating Mathematics with Making and Tinkering Experiences

Convention Center, Meeting Room 211CD
Making and tinkering experiences in our science centers offer rich opportunities to engage learners in the critical topic of mathematics. Come work with your colleagues and team members from the Math in the Making project to develop and explore new approaches to integrating math with maker activities.

Session Leader: Scott Pattison, Director of Administration, Institute for Learning Innovation, Portland, Oregon

EDUCATION AND PROGRAMMING
Making Math Meaningful for Young Children: Playful Explorations in Informal Settings

Convention Center, Executive Ballroom 210C
Math play and exploration help early learners develop foundational skills and concepts. How can you engage children ages 3–6 with math in your museum and your community? In this hands-on session, play with math activities from five informal STEM learning environments, and discover new ideas to take home.

Session Leader: Wendy Brenneman, Manager of Early Childhood STEM Initiatives, Carnegie Science Center, Pittsburgh, Pennsylvania
Session Moderator: Wendy Brenneman, Manager of Early Childhood STEM Initiatives, Carnegie Science Center, Pittsburgh, Pennsylvania
Presenters: Ellen Blinderman, Laurence Hall of Science, Berkeley, California; Katie Brunecz, Carnegie Science Center, Pittsburgh, Pennsylvania; Tara Henderson, Explora, Albuquerque, New Mexico; Jennifer Jovanovic, GrowingGreat, Manhattan Beach, California; James Liu, New York Hall of Science, Queens, New York; and Delia Meza, New York Hall of Science, Queens, New York

LEADERSHIP
Broadening Participation in STEM: Where Do We Go From Here?

Convention Center, Executive Ballroom 210D
Leading professionals in the fields of informal science education and science communication are reviewing the current evidence base (both research and practice) to identify gaps, strategies, and needs for strengthening our efforts to make STEM learning more relevant, empowering, and available to all. This task force convened by CAISE will be rethinking what “broadening participation” means for our fields—moving beyond deficit models, moving beyond “access” models, and moving beyond traditional ideas about “what counts” as science. In this session, we’ll share the nascent work of this group, and ask for your feedback and input through interactive discussions and mapping activities.

Session Leader: Bronwyn Bevan, Senior Research Scientist, University of Washington, Seattle, Washington
Session Moderator: Bronwyn Bevan, Senior Research Scientist, University of Washington, Seattle, Washington
Presenters: Cecilia Garibay, Garibay Group, Chicago, Illinois; and Angela Calabrese Barton, Michigan State University, Lansing, Michigan
STAFF AND WORKFORCE DEVELOPMENT

Building a Professional Learning Framework for Informal STEM Education

Convention Center, Executive Ballroom 210E
How can a professional learning framework lead to intentional career development for informal STEM practitioners? Join a multi-institutional panel discussion about current research focused on understanding essential competencies and skills that help define career trajectories. Attendees will learn how to engage in, and contribute to, this emerging ISE framework.

Session Leader: Margaret Glass, Director, Professional Development, Association of Science-Technology Centers, Washington, D.C.
Session Moderator: Joe Heimlich, Senior Researcher, COSI, Columbus, Ohio
Presenters: Dennis Schatz, Pacific Science Center, Seattle, Washington; Kris Morrissey, University of Washington, Seattle, Washington; and Andrew Lloyd, International Centre for Life, Newcastle upon Tyne, United Kingdom

LEADERSHIP

Reflecting on Practice: Pushing the Field Toward Professional Learning

Convention Center, Executive Ballroom 210A
How do we cultivate learning organizations that emphasize the learning and growth of its employees? How can we make it sustainable? Learn from stories shared by senior directors at three organizations as they reflect on their experiences advocating for, and supporting adoption of, the Reflecting on Practice program.

Session Leader: Lynn Uyen Tran, Director of Research, Lawrence Hall of Science, Berkeley, California
Session Moderator: Lynn Uyen Tran, Director of Research, Lawrence Hall of Science, Berkeley, California
Presenters: Elizabeth Babcock, California Academy of Sciences, San Francisco, California; Rena Dorph, Lawrence Hall of Science, Berkeley, California; and Preeti Gupta, American Museum of Natural History, New York, New York

3:00–4:15 p.m.

EDUCATION AND PROGRAMMING

Just How “Adult” Can Adult Programming Be before We Cross the Line?

Convention Center, Executive Ballroom 210A
Just how far can we go in presenting activities and shows at adult events? When do we cross over from edgy to poor taste? What are the national, local, and current ideologies that we should consider? Join us for what should be a lively discussion regarding the underbelly of adult programs.

Session Leader: Paul Taylor, Traveling Science Show and Community Outreach Manager, The Franklin Institute, Philadelphia, Pennsylvania
Presenters: Kath Blair, TELUS Spark, Calgary, Alberta, Canada; Jessica Lausch, Carnegie Science Center, Pittsburgh, Pennsylvania; Jennifer Young, Science Central, Fort Wayne, Indiana; David Sittenfeld, Museum of Science, Boston, Massachusetts; and Andrea Decker, Reuben H. Fleet Science Center, San Diego, California
EXHIBITS AND ENVIRONMENTS

How Maps Lie: A Critical Look at the Role Maps Play in Exhibits

Convention Center, Meeting Room 212AB
Challenge your assumptions about maps and explore new possibilities for maps in science exhibits. Try your hand at new ways of mapmaking and consider the ways maps—intentionally or not—reflect our values and perspectives and learn how to use maps to create more intentional and inclusive exhibits.

Session Leader: Margaret Middleton, Exhibit Designer, Independent, Providence, Rhode Island
Presenters: Frieda McAlear, Level Playing Field Institute, Oakland, California; and Andrew Middleton, Independent, Oakland, California

COMMUNITY ENGAGEMENT AND OUTREACH

Sensory-Friendly Science: Designing Opportunities to Engage Toddlers to Young Adults with Autism Spectrum Disorders

Convention Center, Executive Ballroom 210H
For visitors with autism, museums can be safe spaces for exploration, learning, and socialization, or they can be the opposite—uncomfortable places with sensory overstimulation. Learn how three museums are approaching autism programming, from early childhood through young adults, to make museums successful experiences for these populations.

Session Leader: Sara Lowenburg, Museum Educator for Access Programs, Intrepid Sea, Air & Space Museum, New York, New York
Presenters: Beth Redmond-Jones, San Diego Natural History Museum, San Diego, California, and Cheryl McCallum, Children’s Museum of Houston, Houston, Texas

LEADERSHIP

Achieving Diverse Leadership: The Need, The Barriers, and Some Solutions

Convention Center, Executive Ballroom 210B
Science center leadership, as with most other U.S. cultural and informal learning institutions, remains overwhelmingly White. This session will present a factual baseline of the state of the industry, discuss some of the barriers, and offer solutions to the challenges of diversifying the leadership at the CEO and board level.

Session Leader: James Abruzzo, President, Abruzzo Associates, Jersey City, New Jersey
Presenters: Chevy Humphrey, Arizona Science Center, Phoenix, Arizona; and Tonya Matthews, Michigan Science Center, Detroit, Michigan

EDUCATION AND PROGRAMMING

Beyond the Webinar: Best Practices for Educator Professional Development Using Online and Blended Learning

Convention Center, Meeting Room 211CD
Learn about cutting edge approaches to educator professional development using a mix of online, digital and in-person tools. This interactive panel will showcase three models of online PD for educators, including technologies employed, forms of engagement, and measures of success.

Session Leader: Rik Panganiban, Senior Instructional Design Lead, California Academy of Sciences, San Francisco, California
Presenters: Rik Panganiban, California Academy of Sciences, San Francisco, California; Saundra Frerichs, University of Nebraska, Lincoln, Nebraska; Jennifer Fee, Cornell Lab of Ornithology, Ithaca, New York; and Po Bhattacharanya, California Academy of Sciences, San Francisco, California
LEADERSHIP

Drawing the Line: Where Does Science Education End and Policy Advocacy Begin?

Convention Center, Executive Ballroom 210C

Ideally, our collective efforts contribute to STEM literacy and evidence-based decision making. But, how do we connect these dots? Should we present just the facts? Weigh risks and benefits? Promote specific actions and choices? How do museums push back against the notion that we now live in a post-factual world?

Session Leader: Victoria Coats, Manager of Research, Development & Advancement, Oregon Museum of Science and Industry, Portland, Oregon

Presenters: Becca Hatheway, National Center for Atmospheric Research/UCAR, Boulder, Colorado; David Sittenfeld, Museum of Science, Boston, Massachusetts; Patrick Hamilton, Science Museum of Minnesota, St. Paul, Minnesota; and Dan Kahan, Yale Law School, New Haven, Connecticut

EDUCATION AND PROGRAMMING

You Asked NASA For Resources; Here They Are

Convention Center, Meeting Room 211AB

NASA asked the ASTC community, “How do we excite your audiences about human exploration of deep space?” You answered. From planetarium animations to digital toolkits for space-themed events, a variety of products are now available. Co-presented with partnering institutions, learn how your colleagues are successfully integrating these new NASA resources.

Session Leader: Patricia Moore, Museum Liaison Exploration Systems Development Division, NASA, Houston, Texas

Session Moderator: Patricia Moore, Museum Liaison Exploration Systems Development Division, NASA, Houston, Texas

Presenters: Patricia Moore, NASA, Houston, Texas; Kirk Pierce, NASA, Huntsville, Alabama; William Harris, Space Center Houston, Houston, Texas; Bryan Debates, Space Foundation, Colorado Springs, Colorado; and Tiffany Farmer, Adventure Science Center, Nashville, Tennessee

STAFF AND WORKFORCE DEVELOPMENT

ASTC’s Communities of Practice Clinic

Convention Center, Executive Ballroom 210D

Are you interested in connecting with your colleagues worldwide from museums and the informal science education (ISE) field? Do you have burning questions related to a specific interest or your career? Do you like downloading resources? Then drop by ASTC’s Communities of Practice (CoPs) clinic! This is your one-stop shop for learning about the 27 CoPs in our network! ASTC staff will be available to answer questions and will provide information about joining and becoming active in CoPs, or submitting a proposal for developing a new community! Drop in and connect!

Session Leader: Korie Twiggs, Program Specialist, Association of Science-Technology Centers, Washington, D.C.

Presenters: Wendy Hancock, Association of Science-Technology Centers, Washington, D.C.

EDUCATION AND PROGRAMMING

From Nice to Necessary: Lessons from Identifying and Supporting Productive STEM Programs in Out-of-school Settings

Convention Center, Executive Ballroom 210G

Out-of-school time programming is often seen as a “nice to have,” and too often focused on resources that we think our communities need. Four institutions share programs that are engaging, responsive, and connected, pushing them to the “necessary” category—both for the community and for the organization.

Session Leader: Nina Nolan, Clubhouse to College/Career Program Manager, Museum of Science, Boston, Massachusetts

Session Moderator: Bronwyn Bevan, Senior Research Scientist, University of Washington, Seattle, Washington

COMMUNITY ENGAGEMENT AND OUTREACH

Building Bridges: Empathetic Listening, Appreciative Inquiry, and Community Inclusion as Authentic Community Engagement Work

Convention Center, Executive Ballroom 210E

Authentic community engagement describes a healthy and sustainable ecology of participation wherein there is a reciprocal relationship between the museum and community. Explore program and institutional initiatives that take a critical look at traditional power dynamics, breaking down walls and building bridges between underrepresented cultural communities and science centers.

Session Leader: Robby Callahan Schreiber, Manager, Career & Community Connections, Science Museum of Minnesota, St. Paul, Minnesota


APPLICATIONS OF RESEARCH AND EVALUATION

In Their Own Words: The Value of Science Centers on Center Stage

Convention Center, Meeting Room 212C

If our public spoke about the influence we have on their lives, what would they say? How would we respond? Today, we bring you those voices—dramatic readings of results from the Multi-Institution Science Center Effects Study, based on interviews and surveys of diverse individuals from Los Angeles, Philadelphia, and Phoenix.

Session Leader: Kate Livingston, Principal, ExposeYourMuseum LLC, Denver, Colorado

Presenters: Benjamin Dickow, Columbia Memorial Space Center, Downey, California; John Falk, Institute for Learning Innovation, Corvallis, Oregon; and Troy Livingston, ExposeYourMuseum, Denver, Colorado

LEADERSHIP

Progress in Diversity and Innovation: Shifting Organizational Culture as Change Agents

Convention Center, Executive Ballroom 210F

A recent Silicon Valley Business Journal article acknowledged that “progress in diversity isn’t moving at nearly the pace of innovation.” With the results of a two-year gender equity effort showing little change, high-tech companies continue to struggle. This panel discussion features Silicon Valley executives and museum executives in dialogue about inclusion efforts that are gaining traction.

Session Leader: Jenni Martin, Director of Education and Strategic Initiatives, Children’s Discovery Museum of San Jose, San Jose, California

Presenters: Catherine Horne, Discovery Place, Inc., Charlotte, North Carolina; Joe Hastings, Explora, Albuquerque, New Mexico; and Stephanie Ratcliffe, The Wild Center/Natural History Museum of the Adirondacks, Tupper Lake, New York

4:30–6:00 p.m.

Networking Reception in the Exhibit Hall

Convention Center, Halls 1 & 2

The Networking Reception in the Exhibit Hall will give you even more opportunities to interact with your fellow conference attendees from across the globe. The reception is free of charge (cash bar available).

5:00–6:30 p.m.

ASTC Governing Members Appreciation Reception

The Westin, Atrium

By invitation only.

Sponsored by IMAX

6:15–7:30 p.m.

Mentoring Social

Marriott, San Jose Ballroom III

Ready to advance your career, expand your knowledge, develop leadership skills, or help advance other museum professionals? Mentorships do these and more, benefiting mentors and mentees. Join our lively reception with mingling activities and tips for getting mentor-mentee relationships started. Cash bar and snacks provided.

By invitation only.
The Association of Science-Technology Centers is pleased to announce the establishment of the

**ASTC Diversity Challenge Fund**

which supports ASTC’s work in **increasing equity and diversity** among the professional staff, boards, and audiences of the science center field.

Inspired by the first leadership gift made from **Arizona Science Center** and **Chevy Humphrey**, Immediate Past Chair of ASTC’s Board of Directors, the following Founding Donors are leading the way in securing the future for ASTC’s Equity and Diversity initiatives:

- **International Centre for Life** - **Linda Conlon**, Chair, ASTC Board of Directors
- **Science North** - **Guy Labine**, Chair Elect, ASTC Board of Directors
- **The Wild Center** - **Stephanie Ratcliffe**, Secretary, ASTC Board of Directors
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- **Gillian Thomas** - **ASTC, Interim CEO**

Our grateful thanks for your leadership and generosity.

Please contact **Gillian Thomas** at **gthomas@astc.org** if you would like to join this effort.
MONDAY, OCTOBER 23

7:00 a.m.–3:00 p.m.

Registration Open
Convention Center, Concourse Level Prefunction

9:15–10:30 a.m.

EDUCATION AND PROGRAMMING
Happy Birthday, Frankenstein! Leveraging the Bicentennial to Create Conversations about Science, Society, and Much More
Convention Center, Executive Ballroom 210E

In 2018, Frankenstein will be 200 years old! Learn how organizations are using this occasion to explore the science and world behind the book and their meaning today. Leave with ready-to-use resources, ideas, and activities that you can use to celebrate the bicentennial of the story that sparked science fiction.

Session Leader: Anika Taylor, Outreach Programs Manager, The Bakken Library and Museum, Minneapolis, Minnesota

Presenters: Rae Ostman, Arizona State University, Tempe, Arizona; Juliet Burba, The Bakken Library and Museum, Minneapolis, Minnesota; and Keith Ostfeld, Children’s Museum of Houston, Houston, Texas

APPLICATIONS OF RESEARCH AND EVALUATION
Latin American Teenagers: Science Center or Shopping Mall?
Convention Center, Executive Ballroom 210D

In Latin America, teenagers are the age band least seen in science centers. Eight science centers in the region and Oregon State University designed a research project, headed by RedPOP, to engage teens in science centers and hear from them how to make science centers more relevant for them.

Session Leader: Luisa Massarani, Science Communication Researcher, Museu da Vida—Fiocruz, Rio de Janeiro, Brazil

Presenters: Shaun Rowe, Hatfield Marine Science Center Visitor Center, Newport, Oregon; Sigrid Falla, Maloka, Centro Interactivo de Ciencia y Tecnologia, Bogota, Colombia; Silvia Singer, MIDE, Museo Interactivo de Economia, Mexico City, Mexico; and Luisa Massarani, Museu da Vida—Fiocruz, Rio de Janeiro, Brazil

COMMUNITY ENGAGEMENT AND OUTREACH
Trauma Responsiveness Training: Seeing the World through the Lens of Trauma
Convention Center, Meeting Room 211CD

Emotional trauma can be caused by sexual assault, child abuse, war, and even chronic poverty. It affects more than half of adults and can have a severe and lasting impact. The purposes of this session are to aid museums in recognition of trauma, to build responsiveness, and to avoid re-traumatization.

Session Leader: Kathleen Stevison, Manager of STEaM Content, Saint Louis Science Center, St. Louis, Missouri


EXHIBITS AND ENVIRONMENTS
Fun with Climate Science! Creative Ways to Engage the Public with Climate Change
Convention Center, Executive Ballroom 210C

How do we have fun and empower people for a positive future in the face of climate change? Science centers must help people to understand mechanisms of climate change, even if the issue is daunting. We will showcase four creative approaches to facilitate productive and empowering discussions with audiences.

Session Leader: Mary Jane Conboy, Director, Science Content and Design, Ontario Science Centre, Toronto, Ontario, Canada

Presenters: Mary Jane Conboy, Ontario Science Centre, Toronto, Ontario, Canada; John Anderson, New England Aquarium, Boston, Massachusetts; and Jason Armstrong, Canada Science and Technology Museums Corporation, Ottawa, Ontario, Canada
INNOVATIONS IN SCIENCE AND TECHNOLOGY
Opportunities for Biotechnology Engagement: Lessons Learned, Risks, and New Directions
Convention Center, Meeting Room 212AB
New techniques including gene editing and real-time DNA sequencing are transforming biotechnology, but raise complex and controversial issues and challenges for engagement. What’s been tried, what’s been learned, and what should we try next? Experience illustrative examples utilizing diverse formats, and suggest new experiments and opportunities for the field.

Session Leader: David Sittenfeld, Program Manager, Forum, Museum of Science, Boston, Massachusetts

DEVELOPMENT AND MEMBER RELATIONS
Meet the Funders
Convention Center, Meeting Room 212C
We all need financial resources to achieve our mission. Corporate support often starts with a great relationship with your local community social responsibility director. We have gathered a group of giving officers from local companies to talk about how to work with them most effectively.

Session Leader: Maria Pappas, Vice President of Development, The Tech Museum of Innovation, San Jose, California
Session Moderator: Maria Pappas, Vice President of Development, The Tech Museum of Innovation, San Jose, California
Presenters: Siobhan Kenney, Applied Materials, Santa Clara, California; Kelly Petrich, Cisco, San Jose, California; and Josh Russell, Bank of America, San Jose, California

LEADERSHIP
A New Science Center: From Vision to Strategy to Reality
Convention Center, Executive Ballroom 210B
Setting up a science center is a complex task requiring vision, money, determination, and much more. Once the strategy is drawn up, critical conditions must be met, including convincing stakeholders, tackling problems, and translating relevance/sustainability into a sound operational plan. After opening the real challenge begins: operating in a financially sound manner and sustainably for our environment, visitors, communities, and other stakeholders.

Session Leader: Erik Jacquemyn, International Consultant, Jacquemyn & Associates, Mechelen, Belgium
Presenters: Frank Steslow, Phillip and Patricia Frost Museum of Science, Miami, Florida; Nicolas Didier, Luxembourg Science Center, Luxembourg, Luxembourg; Dou Bercovici, The Discovery Centre, Halifax, Nova Scotia, Canada; Michele Lanzinger, Museo delle scienze (MUSE), Trento, Italy; and Luiz Alberto Oliveira, Museu do Amanha, Rio de Janeiro, Brazil

EDUCATION AND PROGRAMMING
Career Awareness and Exploration in Museum Youth Programs: Meeting Future Needs Now
Convention Center, Executive Ballroom 210A
Science centers are the epicenter of STEM education for communities and can impact individuals’ career awareness. Explore how four centers from across the United States have developed programs to address STEM workforce needs, helping direct and assist youth to identify career paths in STEM fields, and in turn, strengthening their communities.

Session Leader: Robby Callahan Schreiber, Manager, Career & Community Connections, Science Museum of Minnesota, St. Paul, Minnesota
Presenters: Nina Catubig Nolan, Museum of Science, Boston, Massachusetts; Peter Kirschmann, Museum of Science, Boston, Minnesota; Susanne Dorr, miSci (Museum of Innovation and Science), Schenectady, New York; and Summer Scarlatelli, Museum of Discovery and Science, Ft. Lauderdale, Florida
EDUCATION AND PROGRAMMING

Keep the Wow, Ditch the Ow! Keeping Informal Science Education Sensational and Safe
Convention Center, Meeting Room 211AB
Keeping informal science education highly engaging while maintaining a safe environment for educators and visitors alike is critical to providing high-quality museum experiences. Attendees will learn about, share past experiences and practice assessing the safety of demonstrations using hazard risk assessments, as recommended under NFPA 45’s educational demonstrations guidelines.

Session Leader: Shanna Caster, Public Programs Manager, The Franklin Institute, Philadelphia, Pennsylvania
Presenters: Christina Dillard, Museum of Science, Boston, Massachusetts; Kenny Webster, Science Museum, London, United Kingdom; Jaxon Brinsfield, Science Museum Oklahoma, Oklahoma City, Oklahoma; and Clint Stone, Science Museum Oklahoma, Oklahoma City, Oklahoma

COMMUNITY ENGAGEMENT AND OUTREACH

Beyond the (Science) Choir: How Art and Culture Broaden Audiences
Convention Center, Executive Ballroom 210F
Many forms of adult informal science learning attract an already-engaged “science choir.” While it is important to serve audiences already interested in science (or STEM), we examine a variety of projects that embed science into art and culture in ways that can reach people who are culturally interested but distant to STEM.

Session Leader: Mark Rosin, Director (U.S.), Guerilla Science, New York, New York
Session Moderator: Martin Storksdieck, Director, Center for Research on Lifelong STEM Learning, Oregon State University, Corvallis, Oregon
Presenters: Marina McDougall, Exploratorium, San Francisco, California; Jen Wong, Science Gallery London, London, United Kingdom; and Jenni Martin, Children’s Discovery Museum of San Jose, San Jose, California

EDUCATION AND PROGRAMMING

Closing the Play Gap for Social Change: Lessons from beyond Science Centers
Convention Center, Executive Ballroom 210H
Children have less unstructured playtime than they did 20 years ago, and troubling research suggests that children in high-income families experience more “quality playtime” than those from under-resourced ones. Science centers can intentionally bridge this gap through design, programs, and practices that can yield positive youth outcomes.

Session Leader: Carol Tang, Executive Director, Children’s Creativity Museum, San Francisco, California
Session Moderator: Carol Tang, Executive Director, Children’s Creativity Museum, San Francisco, California
Presenters: Devon Hamilton, Playful Content, Calgary, Alberta, Canada; Caroline Ingeborn, Toca Boca, San Francisco, California; and Jenni Martin, Children’s Discovery Museum of San Jose, San Jose, California
FLASH SESSIONS
Thinking Outside the Box
9:15 a.m.–10:30 a.m., Convention Center, Executive Ballroom 210G
Moderator: Jessica Lausch, Director of Visitor Experience, Carnegie Science Center, Pittsburgh, Pennsylvania

The Wild Side of Science: How Live Animals Enhance the Total Science Center Experience
Find out how our nature center residents help introduce all aspects of science found in Science City, including the Maker Studio; the main focus on biomimicry; and how some of the animals are helping to solve engineering problems in our human world.

**Presenter:** Becky Plumberg, Science City at Union Station, Kansas City, Missouri

Going Green: The Program Benefits of Green Space Exhibitions
Green spaces at museums present new opportunities for learning, especially in urban settings. Having an area that is alive and always changing naturally draws out one’s curiosity and engages all the senses. Join this flash session and discover how outdoor nature exhibitions impact museum programming.

**Presenter:** Gabrielle Sjoberg, Natural History Museum of Los Angeles County/Page Museum at the La Brea Tar Pits, Los Angeles, California

Food for Thought
Food workshops held in the Edible Garden and three-acre habitat at the Natural History Museum of Los Angeles County are one of the most accessible ways to learn about nature. These workshops catalyze dialogue through participants’ own stories about food, and a focus on ingredients leads the participants’ attention from food to nature.

**Presenter:** Vanessa Vobis, Natural History Museum of Los Angeles County/Page Museum at the La Brea Tar Pits, Los Angeles, California

Getting the Word Out about Evaluation Findings
Are you looking for ways to share key evaluation findings with stakeholders beyond the project teams for which the evaluations were conducted? This presentation will highlight how the Saint Louis Science Center developed a report format that, as an annual publication, presents an overview of a range of evaluation studies.

**Presenter:** Elisa Israel, Saint Louis Science Center, St. Louis, Missouri

Overcoming Imposter Syndrome: Thriving in a Science Center without a STEM Degree
Working in a science center doesn’t require a STEM degree, yet it’s easy to feel like an imposter in a world of formally trained professionals. This session explores how to have a STEM career without a STEM background by bucking imposter syndrome and embracing innovative thinking and an “outsider’s” perspective.

**Presenter:** Nina Rubin, California Academy of Sciences, San Francisco, California

Out of the Lab: Simple Activities for Overcoming Stereotype Threats and Building Confidence
It’s tricky to directly apply research on STEM learning. In a science program for girls, we applied psychology research findings to build identification with science, overcome stereotypes, and build confidence. In this session we share specific techniques, evaluation findings, and handouts for the questions and prompts that worked.

**Presenters:** Suzanne Perin, University of Washington, Seattle, Washington; Laura Conner, University of Alaska Fairbanks, Fairbanks, Alaska; and Laura Oxtoby, University of Alaska Fairbanks, Fairbanks, Alaska
10:45–11:30 a.m.

Alan J. Friedman Science Center Dialogues
Convention Center, Grand Ballroom 220

The Alan J. Friedman Science Center Dialogues at the ASTC Annual Conference each year are thought-provoking discussions that serve as a vibrant memorial to the founding director of the New York Hall of Science, Queens. They are presented in the spirit of his commitment to the science center field and to the issues and interests reflected in his own writings and presentations over the years.

Getting children from underserved populations into the New York Hall of Science and helping them to build careers was central to Alan’s many achievements there. His models and ideas have become a significant part of what many science centers do to serve their communities.

However, institutions continue to define what “serving the community” really means, with many seemingly content to see their roles as “being more present.” At some point this may not be enough. It could even have a negative effect.

This year’s conversation centers on the relevance of science centers and museums in their communities. What does community engagement look like? Sound like? Who is talking, and who is listening? What is the best response when someone says the science center is “not designed for us?”

Join us for a challenging discussion with three people who have been thinking deeply, writing widely, and acting decisively on these issues.

Deborah Cullinan, chief executive officer at the Yerba Buena Center for the Arts in San Francisco, joined the organization four years ago. Under her stewardship, it has sharpened its mission and vision—re-grounding the center in its origins as a citizen institution and San Francisco’s premiere art center built by the community, for the community. Fostering a “culture of invitation,” she brings together creative citizens of all kinds to spur social change.

Emily Dawson is a lecturer in science communication in the Department of Science & Technology Studies at University College London. Her work focuses on how people engage with and learn about science, with an emphasis on equity and social justice. Her current research explores how to disrupt—rather than reproduce—social disadvantages in relation to science education, engagement, and communication.

Diana Pardue is chief of the museum services division at the Statue of Liberty National Monument and Ellis Island in New York City. A member of the executive board of ICOM, the International Council of Museums, she oversees the management of the collection, exhibits and media program, research library, and oral history program. She has been involved internationally with the development of new migration museums, exhibitions, and programs, and she has been active in planning and developing public dialogue programs on U.S. immigration issues with local universities and international site members.

Introduction by Margaret Honey, CEO, New York Hall of Science, Queens, New York
Moderated by Manny Barbara, Vice President, Silicon Valley Education Foundation, and Board Member, The Tech Museum of Innovation
Sponsored by THE KAVLI FOUNDATION
**ASTC Community of Practice Meet-Ups**

Communities of Practice (CoPs) are groups of informal education professionals who share a concern or a passion for something they do and want to do better as they interact regularly. The following CoPs will be meeting at the 2017 ASTC Annual Conference for brainstorming, planning, and networking. For a current list of CoPs, visit www.astc.org/communities-of-practice.

### 11:00 a.m.–12:00 p.m.

**Marriott, San Jose Ballroom I**

- Citizen Science
- Early Childhood
- Museum Screens
- Small Museums

**Marriott, San Jose Ballroom II**

- Advocates for Diversity
- Museum-Hospital Partnerships
- STEM Afterschool
- Visitor Services

### 1:00–2:00 p.m.

**Marriott, San Jose Ballroom I**

- Adult Engagement
- Camp Programs for Youth

**Marriott, San Jose Ballroom II**

- Information Technology
- STEAM (virtual meet-up)

### 2:30–3:45 p.m.

**LEADERSHIP**

**Science Center Superheroes: Life at the Intersection of Passion and Persistence**

*Convention Center, Meeting Room 212AB*

Operating at the intersection of passion and persistence is a science center superhero. These talented people find creative ways to innovate regardless of politics, personalities, and budget constraints. Find out who the “intrapreneurs” are in your organization and how they get so much done with so little.

**Session Leader:** Christian Greer, Chief Officer for Science + Education + Experience, Saint Louis Science Center, St. Louis, Missouri

**Presenters:** Gretchen Walker, The Tech Museum of Innovation, San Jose, California; Veronica Garcia-Luis, Exploratorium, San Francisco, California; and Jenn Barlup, COSI, Columbus, Ohio
ADMINISTRATION

Anti-fragile Museums: How to Never Waste a Good Crisis

Convention Center, Executive Ballroom 210D

Resilient organizations resist shocks and stay the same. In contrast, “anti-fragile” organizations embrace shocks and get stronger as a result. Join CEOs and program leaders from two continents for a discussion of how to take advantage of challenges to improve both their internal functioning and external relationships.

Session Leader: Charlie Trautmann, Director Emeritus, Sciencenter, Ithaca, New York

Presenters: Chevy Humphrey, Arizona Science Center, Phoenix, Arizona; Rae Ostman, Science Museum of Minnesota, St. Paul, Minnesota; Marcos Stafne, Montshire Museum of Science, Norwich, Vermont; Linda Conlon, International Centre for Life, Newcastle upon Tyne, United Kingdom; Daniel Rother, Pacific Science Center, Seattle, Washington; and Kim Herlev, Experimentarium, Hellerup, Denmark

COMMUNITY ENGAGEMENT AND OUTREACH

Going beyond the Money: Reimagining Museum Partnerships in a Three-act Review

Convention Center, Executive Ballroom 210C

Learn how to have a collaborative relationship with local and international corporations beyond a monetary sponsorship. Whether you are looking for, managing, or wanting to spice up a long-term partnership, you will leave this session with inspiration, tips, and an action plan. Hear from museum and industry professionals.

Session Leader: Carlin Hsueh, Program Manager, World Biotech Tour, Association of Science-Technology Centers, Washington, D.C.

Session Moderator: Ann Hernandez, Program Manager, Professional Development, Association of Science-Technology Centers, Washington, D.C.


EDUCATION AND PROGRAMMING

Navigate the Galactic Zoo of Citizen Science Projects and Approaches

Convention Center, Executive Ballroom 210B

Citizen science can be a powerful STEM education tool, but a vast landscape of projects and resources can be challenging to navigate. Learn how museums leverage projects for different audiences and purposes, and how you can select and advocate for the style of engagement that’s right for you.

Session Leader: Laura Herszenhorn, Senior Manager, Science Action Club, California Academy of Sciences, San Francisco, California

Session Moderator: Neal Ramus, Senior Manager of Youth Programs, California Academy of Sciences, San Francisco, California

Presenters: Brian Levine, American Museum of Natural History, New York, New York; Leonora Shell, North Carolina State University, Raleigh, North Carolina; and Julie Feldt, Zooniverse, Chicago, Illinois

STAFF AND WORKFORCE DEVELOPMENT

Innovative Approaches to Staff Development and Teacher Training Using IMLS Grant Funding

Convention Center, Meeting Room 211CD

This session will feature three IMLS grant-funded projects demonstrating the role of museums as providers of innovative professional development for museum education staff and teachers to meet new challenges to learning in informal science education. Information about upcoming IMLS funding opportunities will be provided by an IMLS program officer.

Session Leader: Mark Isaksen, Senior Program Officer, Institute of Museum and Library Services, Washington, D.C.

Presenters: Christina O’Guinn, The Tech Museum of Innovation, San Jose, California, and Lesley Kennedy, Museum of Science, Boston, Massachusetts
EXHIBITS AND ENVIRONMENTS

Virtual Reality: Let’s Get Real! Is VR Finally Ready for the Science Center Floor?

Convention Center, Executive Ballroom 210F

This session brings real-world examples and insight to exploring the emerging opportunities as virtual reality platforms and content rapidly develop. Science center leaders engaging visitors with VR will team up with entrepreneurs on the leading edges of both application development and partnerships to present compelling ideas for action.

Session Leader: Kevin Von Appen, Director, Science Communication, Ontario Science Centre, Toronto, Ontario, Canada

Presenters: Susan Poulton, The Franklin Institute, Philadelphia, Pennsylvania; Joseph Wilson, Spongelab Interactive, Toronto, Ontario, Canada; Neil Schneider, Immersive Technology Alliance, Toronto, Ontario, Canada; Sandy Baumgartner, Saskatchewan Science Centre, Inc., Regina, Saskatchewan, Canada; Martin Timusk, Ontario Science Centre, Toronto, Ontario, Canada; and Dave Patten, Science Museum, London, United Kingdom

COMMUNITY ENGAGEMENT AND OUTREACH

Fighting for Progress on Equity and Inclusion at Science Centers in the United States and Europe

Convention Center, Executive Ballroom 210H

This panel focuses on the efforts of science centers to promote equity and social inclusion—most typically by changing themselves. Presenters will share lessons from equity and inclusion initiatives in the United States and Europe. We conclude with a presentation that critiques the “whiteness” of museum-based equity work.

Session Leader: Noah Weeth Feinstein, Associate Professor, University of Wisconsin-Madison, Madison, Wisconsin

Session Moderator: Cecilia Garibay, Principal, Garibay Group, Chicago, Illinois

Presenters: Elizabeth Rasekoala, African Gong—the Pan-African Network for the Popularisation of Science & Technology and Science Communication, Capetown, South Africa; Evelyn Ronning, Science Museum of Minnesota, St. Paul, Minnesota; Esther HsuBorger, University of Wisconsin-Madison, Madison, Wisconsin; and Heidrun Schulze, Austrian Science Center-Network, Vienna, Austria

EDUCATION AND PROGRAMMING


Convention Center, Meeting Room 211AB

Finding information is easy, but how can we create meaningful experiences for visitors to personally connect with science? Discover how educators are striving to meet this challenge through an innovative partnership with Visual Thinking Strategies, an art-based organization that leverages discussion and inquiry to deepen curiosity and learning skills.

Session Leader: Kerri Zieman, Experiential Programs Manager, The Wild Center/Natural History Museum of the Adirondacks, Tupper Lake, New York


ADMINISTRATION

Enter the Amazing World of Agricultural Science

Convention Center, Meeting Room 212C

Food affects every corner of our planet! As the world prepares to feed 10 billion people by 2050, U.S. Department of Agriculture researchers and partners around the world make advancements almost daily. Engage with leaders from various fields who discuss their agricultural science—and its interdisciplinary nature—inspiring new ways to think about partnerships.


Session Moderator: Damon Thompson, Director of Communications, Research, Education, and Economics Mission Area, U.S. Department of Agriculture, Washington, D.C.

**EDUCATION AND PROGRAMMING**

**Improving Community, Collaboration, and Communication through Ice-breakers, Improv, and Team Building**

**Convention Center, Executive Ballroom 210G**

Come ready to move! This in an interactive session filled with improv, ice-breakers, and team building exercises. This session will leave you with activities that can be used to increase collaboration; positive communication; and listening skills amongst staff, volunteers, and teens.

**Session Leader:** Aimee Davis, Volunteer and Public Learning Experiences Administrator, The Field Museum of Natural History, Chicago, Illinois

**Presenters:** Aimee Davis, The Field Museum of Natural History, Chicago, Illinois; Josh Kemper, Pacific Science Center, Seattle, Washington; Brisa Rivas, California Science Center, Los Angeles, California; Marcia Bueno, New York Hall of Science, Queens, New York; and Joey Rodriguez, Center for Aquatic Sciences at Adventure Aquarium, Camden, New Jersey

**APPLICATIONS OF RESEARCH AND EVALUATION**

**Planning Competitive National Science Foundation Proposals**

**Convention Center, Executive Ballroom 210E**

(U.S) National Science Foundation (NSF) program officers will provide an overview of NSF’s educational research and development funding opportunities for informal STEM learning projects, followed by a discussion of project planning, research, evaluation, IRBs, and other “nuts and bolts” involved in proposal development.

**Session Leader:** Robert Russell, Program Director, National Science Foundation, Arlington, Virginia

**Presenters:** Alphonse DeSena, National Science Foundation, Arlington, Virginia; Monya Ruffin, National Science Foundation, Arlington, Virginia; and Wyn Jennings, National Science Foundation, Arlington, Virginia

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**EXTENDED SESSION**

2:30–4:30 p.m.

**EXHIBITS AND ENVIRONMENTS**

**Designing Early Learning Environments for Parent Engagement**

Children’s Discovery Museum of San Jose

180 Woz Way

How can science centers, children’s museums, and other early learning spaces best support parent engagement in their child’s play and learning? This interactive session—held in the museum’s exhibit halls—will explore intentional exhibit design, embedded cultural and linguistic supports, and parent communication tools. Preregistration required; registrants check in at admissions desk. No transportation provided.

**Session Leader:** Jenni Martin, Director of Education and Strategic Initiatives, Children’s Discovery Museum of San Jose, San Jose, California

**Presenters:** Ellen Blinderman, Lawrence Hall of Science, Berkeley, California; Amy Eisenmann, Bay Area Discovery Museum, Sausalito, California; and Maureen Callanan, University of California, Santa Cruz, Santa Cruz, California
LEADERSHIP

Hybridism: A New Keyword for Science Centers and Museums

Convention Center, Executive Ballroom 210H

Science centers and museums today are mostly places of convergence of different kinds of scientific and cultural institutions. This session aims at opening a discussion on this new concept of “hybrid” organizations, presenting cases of institutions that already play “hybridism” in their activities.

Session Leader: Vincenzo Lipardi, CEO, Citta’ della Scienza, Naples, Italy

Presenters: Tom Rockwell, Exploratorium, San Francisco, California; Larry Dubinski, The Franklin Institute, Philadelphia, Pennsylvania; and Rosalia Vargas, Pavilion of Knowledge—Ciência Viva, Lisbon, Portugal

EDUCATION AND PROGRAMMING

Celebrating Science: Organizing a Science Festival
Convention Center, Meeting Room 211AB

Ever wonder what it takes to get a science festival off the ground? How do you make an established festival bigger and better? Come hear about three science festivals of different sizes and styles—from the one-day Rogue Valley Maker Faire to the 45-day Arizona SciTech Festival.

Session Leader: Jennifer Bawden, Science Director, TELUS World of Science—Edmonton, Edmonton, Alberta, Canada

Presenters: Gregory Dills, ScienceWorks Hands-On Museum, Ashland, Oregon; Sari Custer, Arizona Science Center, Phoenix, Arizona; and Jennifer Bawden, TELUS World of Science—Edmonton, Edmonton, Alberta, Canada

STAFF AND WORKFORCE DEVELOPMENT

Informal STEM Learning and Science Communication: Overlaps, Asymmetries, and Opportunities

Convention Center, Executive Ballroom 210B

How do we identify as professionals and professional communities sometimes “silos” us from others whose work has relevance, findings, and challenges that we can learn from and leverage? What are the current and potential ways that the design, evaluation, and research of informal STEM learning and science communication experiences and settings overlap, are in tension, or provide new opportunities for synergy?

Session Leader: Jamie Bell, Project Director, Center for Advancement of Informal Science Education, Washington, D.C.

Session Moderator: Jamie Bell, Project Director, Center for Advancement of Informal Science Education, Washington, D.C.

Presenters: Martin Storksdieck, Oregon State University, Corvallis, Oregon; Karen Cook, Stanford University, Palo Alto, California; Luisa Massarani, Museu da Vida, Rio de Janeiro, Brazil; and Kevin Crowley, University of Pittsburgh, Pittsburgh, Pennsylvania

EDUCATION AND PROGRAMMING

#Csfforall: Leverage Resources and Partnerships to Bring Coding to Your Community

Convention Center, Executive Ballroom 210D

Why start from Scratch? Four organizations will share computer science training models that leveraged existing resources. From Python to Code.org, established platforms and tools can be incorporated into professional development for staff, educators and computer scientists. Come share your ideas and questions about bringing computer science to all communities!

Session Leader: Sarah Carter, Manager, STEM Media & Education, Twin Cities PBS, St. Paul, Minnesota

Session Moderator: Sarah Carter, Manager, STEM Media & Education, Twin Cities PBS, Saint Paul, Minnesota

Presenters: Kathryn Guimond, Science Museum of Minnesota, St. Paul, Minnesota; Katherine Miller, American Museum of Natural History, New York, New York; and Heather Norton, Orlando Science Center, Orlando, Florida
LEADERSHIP

Convention Center, Meeting Room 212AB

Entrepreneurship in science centers and museums happens at many levels, from the programmatic to the organizational. This session invites attendees to explore four cases: a startup museum, a children’s museum, a science center, and a natural history museum through exhibits, incorporation of community voices, connections with local businesses, and new programmatic foci.

Session Leader: Karen Wise, Principal, Wise Strategic Advising, Santa Monica, California
Session Moderator: Karen Wise, Principal, Wise Strategic Advising, Santa Monica, California
Presenters: Karen Wise, Wise Strategic Advising, Santa Monica, CA; Diane Perlov, California Science Center, Los Angeles, California; Lath Carlson, Living Computer Museum, Seattle, Washington; and Jeff Barnhart, Omaha Children’s Museum, Omaha, Nebraska

INNOVATIONS IN SCIENCE AND TECHNOLOGY

Talking about Drones: How to Start a Productive Conversation with Guests in Science Centers
Convention Center, Executive Ballroom 210A

Drones are a controversial and disruptive innovation that may transform civilian applications in science, commerce, and law enforcement. Panelists will discuss the benefits and challenges of drones, strategies for engaging guests at science centers in this discussion, and how to apply these strategies to other controversial emerging technologies.

Session Leader: Perry Roth-Johnson, Exhibit Researcher, Air and Space, California Science Center, Los Angeles, California
Session Moderator: Perry Roth-Johnson, Exhibit Researcher, Air and Space, California Science Center, Los Angeles, California

EXHIBITS AND ENVIRONMENTS

Iterating Institutional Change: Small Experiments in Making a Big Difference
Convention Center, Meeting Room 211CD

What do you do when you’ve followed all the right steps to build something great, but it still isn’t working? This session will help you see an unsuccessful exhibition or operational initiative as another part of your design process, and explore how to iterate towards a more successful institution.

Session Leader: Dana Schloss, Exhibit Designer, New York Hall of Science, Queens, New York
Presenters: Penny Jennings, Oakland Museum of California, Oakland, California; Lath Carlson, Living Computer Museum, Seattle, Washington; and Katherine Ziff, TELUS Spark, Calgary, Alberta, Canada

ADMINISTRATION

Curating Culinary Experiences to Advance Key Business Strategies
Convention Center, Executive Ballroom 210G

Learn how museums have aligned food service to their missions and achieved organizational goals for role modeling sustainability, advancing workforce diversity, reaching new audiences, and supporting conservation efforts. By thinking about food service as more than earned income, these museums are advancing critical agendas in their communities while generating revenue.

Session Leader: Marilee Jennings, Executive Director, Children’s Discovery Museum of San Jose, San Jose, California
Session Moderator: Wendy Weiden, Consultant, Karen Karp & Partners, San Francisco, California
Presenters: Richard Piacentini, Phipps Conservatory & Botanical Gardens, Pittsburgh, Pennsylvania; Gerry VanAcker, Detroit Zoological Society, Detroit, Michigan; and Greg Edgar, Service System Associates, Denver, Colorado
### STAFF AND WORKFORCE DEVELOPMENT

**The Transgender Museum Experience: Creating a Safe Space for Everyone to Work, Learn, and Play**

Convention Center, Executive Ballroom 210C

Transgender people are everyone. They are your colleagues, participants, and visitors. Join trans museum professionals, and allies who have supervised trans employees and volunteers, to learn how you can influence museum environments to be inclusive and supportive of trans and gender-variant individuals.

**Session Leader:** Kaden Borseth, Director of Teen and Family Programs, Fernbank Museum of Natural History, Atlanta, Georgia

**Presenters:** Neal Ramus, California Academy of Sciences, San Francisco, California; Dana Mahoney, Thinkery, Austin, Texas; Robby Callahan Schreiber, Science Museum of Minnesota, St. Paul, Minnesota; Mac Buff, The Museum of Flight, Seattle, Washington; and Yvette Sandoval, Explora, Albuquerque, New Mexico

### EDUCATION AND PROGRAMMING

**Computational Tinkering v2.0: Designing the Next Generation of Computational Learning Activities**

Convention Center, Executive Ballroom 210F

In this session we will share an approach to Computational Tinkering through a new set of making and tinkering tools, technologies, activities, and strategies designed to support important understanding about computational concepts that go beyond the traditional didactic teaching approaches that we’ve come to recognize as Computational Thinking.

**Session Leader:** Mike Petrich, Making-Learning Studio, Exploratorium, San Francisco, California

**Presenters:** Keith Braafladt, Science Museum of Minnesota, St. Paul, Minnesota; Karen Wilkinson, Exploratorium, San Francisco, California; Natalie Rusk, MIT Media Lab, Cambridge, Massachusetts; Amos Blanton, LEGO Foundation, Billund, Denmark; Keith Ostfeld, Children’s Museum of Houston, Houston, Texas; Lydia Beall, Museum of Science, Boston, Massachusetts; and Maria Mortati, Mortati and Friends, San Francisco, California

### COMMUNITY ENGAGEMENT AND OUTREACH

**Awareness, Privilege, and Disruptive Compassion: A Radical Experiment, Part 2**

Convention Center, Executive Ballroom 210E

Successful entrepreneurship endeavors require courage, dedication, and a willingness to fail. As a field we are failing at dismantling oppression to better represent a diversity of people. We can learn from each other. What might it mean for the field if we work together and learn from our failures?

**Session Leader:** Andrea Motto, After School Program Director, Yale Peabody Museum of Natural History, New Haven, Connecticut

**Presenters:** Joseph Adamji, Science Museum of Minnesota, St. Paul, Minnesota; Kellen Nixon, Discovery Place, Inc., Charlotte, North Carolina; Meghan Durieux, TELUS Spark, Calgary, Alberta, Canada; and Priya Mohabir, New York Hall of Science, Queens, New York

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### EXTENDED SESSIONS

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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| 4:15–6:15 p.m. | **STAFF AND WORKFORCE DEVELOPMENT**  
**The Transgender Museum Experience: Creating a Safe Space for Everyone to Work, Learn, and Play**  
Convention Center, Executive Ballroom 210C  
Transgender people are everyone. They are your colleagues, participants, and visitors. Join trans museum professionals, and allies who have supervised trans employees and volunteers, to learn how you can influence museum environments to be inclusive and supportive of trans and gender-variant individuals.  
**Session Leader:** Kaden Borseth, Director of Teen and Family Programs, Fernbank Museum of Natural History, Atlanta, Georgia  
**Presenters:** Neal Ramus, California Academy of Sciences, San Francisco, California; Dana Mahoney, Thinkery, Austin, Texas; Robby Callahan Schreiber, Science Museum of Minnesota, St. Paul, Minnesota; Mac Buff, The Museum of Flight, Seattle, Washington; and Yvette Sandoval, Explora, Albuquerque, New Mexico |
| 6:00–8:30 p.m. | **ASTC Diversity and Leadership Development Fellows Closing Session**  
Marriott, Blossom Hill I  
For 2017 fellows, alumni, and invited guests. |
TUESDAY, OCTOBER 24

Logo Love Day!
Show off your organization today by wearing badges, buttons, hats, jackets, lab coats, sweatshirts, ties, t-shirts, or anything else emblazoned with the logo of your science center, museum, program, or company.

8:00–9:30 a.m.

ASTC Conference Program Planning Committee Meeting
Marriott, Almaden
For members only.

9:00 a.m.-1:00 p.m.

EDUCATION AND PROGRAMMING
Outreach Live
Washington Elementary School
See outreach programs in action at this highly immersive session! Outreachers from several science centers will bring their programs to present at a local school, giving session attendees a chance to observe them in action. A group discussion will follow. Preregistration required. Bus will depart from the Convention Center at 8:30 a.m.

Session Leader: Jonah Cohen, Manager of Science Education, McWane Science Center, Birmingham, Alabama

10:00 a.m.-5:00 p.m.

Museum Open House Day
The Tech Museum of Innovation
Watch the Tech in action! Experience exhibit galleries that represent Silicon Valley, from Cyber Detectives and Social Robots to BioDesign and the newest galleries about health and the human body. Experience augmented reality and virtual reality exhibits along with community favorites like the earthquake simulator and the jet pack chair. Join your peers for backstage tours that highlight specific topical areas including exhibits, education programs and the IMAX theater. For all ages. No registration required.

10:15 a.m.–12:15 p.m.

EXHIBITS AND ENVIRONMENTS
Annual Exhibit Walking Workshop: Inspirations, Frustrations, Outsider Insights, and Examples
The Tech Museum of Innovation
Walking tour of the Tech Museum, guided by its staff and a gang of exhibit professionals. A candid and humorous look at exhibits on the floor, sharing a running commentary of insights from panelists that highlight smart features, safety concerns, new ideas, and some wacky ways to re-imagine existing exhibits.

Meet in the ticketing lobby.

Session Leader: Adam Zuckerman, Exhibits and Collections Consultant, A-Z Museum Services, Sandy Hook, Connecticut
Session Moderator: Prinda Wanakule, Educator, Designer, The Tech Museum of Innovation, San Jose, California
Dimensions like you’ve never seen it before.

Announcing a new way to experience your award-winning Dimensions magazine.

The new digital edition offers a seamless, reader-friendly, responsive experience that adapts to any mobile device or computer screen. It also features engaging content you won’t find on the printed page—including embedded videos, photo slideshows, podcasts, and more from science centers and related organizations around the world.

Free Dimensions subscriptions are available to all paid staff at ASTC-member organizations.

To subscribe, visit astc.org/publications/dimensions and spread the word!
Museum Open House Day

**Tuesday, October 24**

Explore the Tech Museum of Innovation and visit the newest gallery on health and the human body—only one week old! Experience all the updated exhibits imbued with the innovative spirit of Silicon Valley and unleash your inner innovator. Play with AR and VR in *Reboot Reality*, become a cyber sleuth in *Cyber Detectives*, build your own robot in *Social Robots*, experience an earthquake, and create your own creature in the *BioDesign Studio*. Watch amazing film presentations and planetarium demonstrations in the largest domed theater in the West. From 12:00 to 2:00 p.m., enjoy a free workshop about relevance, revenue, and strategy hosted by Tech Museum President and CEO Tim Ritchie. Take behind-the-scenes tours of exhibits, education programs, operations, the IMAX theater, and more.

**Big Screen Day**

The Tech Museum of Innovation, Hackworth IMAX Dome Theater

See the latest in giant screen films.

**Sponsored by**

**Amazon Adventure**

*Amazon Adventure* tells the epic, true story of explorer Henry Bates’s 11-year journey through the visually stunning and biodiverse Amazon rainforest as a young man who risks his life for science. Experience the compelling clues Bates unearthed in his major science discovery of the rare phenomenon of mimicry, whereby certain animals adopt the look of others which helps them deceive predators and gain an advantage to survive. Bates, the scientific hero you’ve likely never heard of, made other crucial contributions—identifying 8,000 species new to science and, most importantly, putting forward the first-ever case for the creation of a new species, which Charles Darwin called the “beautiful proof” for his theory of natural selection. Viewers will be wowed by more than 80 different animals and mind-boggling examples of camouflage and mimicry, and inspired by Bates’ endless curiosity and determination to explore and understand the natural world around him.

**Release Date:** April 18, 2017  
**Available Formats:** 3D, 15/70, DCI-compliant Digital, IMAX Digital, IMAX Laser, Dome-customized 15/70  
**Length:** 45:29  
**Producer/Distributor:** SK Films  
**Contacts:** Amber Hawtin and Jonathan Barker, ahawtin@skfilms.ca  
**Website:** amazonadventurefilm.com

**Big Screen Day Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Film Title</th>
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<tbody>
<tr>
<td>10:35–11:20 a.m.</td>
<td>Amazon Adventure</td>
</tr>
<tr>
<td>12:00–12:40 p.m.</td>
<td>Planet Power</td>
</tr>
<tr>
<td>1:25–2:05 p.m.</td>
<td>Dream Big: Engineering Our World</td>
</tr>
<tr>
<td>2:50–3:30 p.m.</td>
<td>The Search for Life in Space</td>
</tr>
<tr>
<td>4:15–4:45 p.m.</td>
<td>Hurricane, A Wind Odyssey</td>
</tr>
</tbody>
</table>
Planet Power

Planet Power tells the story of electricity, from the first spark created by a human hand to the largest power plants, the age of miracles to that of industry, from Benjamin Franklin’s kite to Solar Impulse, the first solar-powered plane capable of perpetual flight. Thus, it is also a story of pioneers, scientists, and inventors, one that began 200 years ago, driven by innovation. Today, electricity is indispensable to humankind. Energy of choice for innovation and development, electricity is also the energy of our future, as long as it is produced in a cleaner and more sustainable way. By mixing traditional animation, CGI, and spectacular aerial shots, Planet Power shows how renewable energy can help us fight climate change while improving our quality of life and protecting the environment. Now, thanks to clean technologies, the greatest forces of nature can help make our planet cooler and our future better.

**Release Date:** 2018  
**Available Formats:** 2D and 3D, DCI-compliant Digital, IMAX Digital, IMAX Laser, Dome-customized 15/70, Fulldome Digital  
**Length:** 38:29  
**Producer:** N3D Land  
**Distributor:** nWave Pictures Distribution  
**Contacts:** Janine Baker, jbakernwave.com; Jennifer Lee Hackett, jleehackettnwave.com  
**Website:** fullcharge-thefilm.com

Dream Big: Engineering Our World

Narrated by Academy Award-winner Jeff Bridges, Dream Big: Engineering Our World transforms how we think about engineering. From the Great Wall of China and the world’s tallest buildings to underwater robots, solar cars, and smart, sustainable cities, Dream Big celebrates the human ingenuity behind engineering marvels big and small, and shows how engineers push the limits of innovation in unexpected and amazing ways. With its inspiring, personal stories and extraordinary visuals for the world’s largest screens, Dream Big reveals the compassion and creativity that drive engineers to create better lives for people and a more sustainable future for us all. Dream Big is a MacGillivray Freeman film produced in partnership with American Society of Civil Engineers and presented by Bechtel Corporation.

**Release Date:** February 17, 2017  
**Available Formats:** 2D and 3D, 15/70, DCI-compliant Digital, IMAX Digital, IMAX Laser, Dome-customized 15/70, Fulldome Digital  
**Length:** 42:20  
**Producer:** MacGillivray Freeman Films  
**Distributor:** MacGillivray Freeman Films Distribution Company  
**Contact:** Patty Collins, pcollins@macfreefilms.com  
**Website:** www.dreambigfilm.com
The Search for Life in Space
Journey from the depths of the Pacific Ocean into the far reaches of space on a quest to find something that changes everything—signs of life, somewhere else in the universe. With stunning imagery from the world’s most powerful telescopes, this new giant screen film takes audiences from the surface of Mars and the icy moons of Jupiter and Saturn, to the extreme lava fields of Hawaii and the thermal vents deep beneath the sea. In these harsh environments, astrobiologists look for clues to how life takes hold. As this immersive adventure into the universe reveals the possibility of life on planets like our own, The Search for Life in Space will make you re-examine such fundamental questions as: “Are we alone?” The Search for Life in Space is a December Media film produced in association with Film Victoria Australia and Swinburne University of Technology.
Release Date: October 7, 2016
Available Formats: 2D and 3D, 15/70, DCI-compliant Digital, IMAX Digital, IMAX Laser, Dome-customized 15/70, Fulldome Digital
Length: 32:00
Producer: December Media
Distributor: MacGillivray Freeman Films
Contact: Patty Collins, pcollins@macfreefilms.com
Website: searchforlifeinspace.com

Hurricane, A Wind Odyssey
This is the true story of a 9,300-mile (15,000-kilometer) journey in the footsteps of one of the most devastating natural events on our planet: the Atlantic hurricane. Our protagonist is both shatteringly destructive and vital to life on Earth. A mere breeze at its conception, as it sweeps over the African Sahel it becomes a life-giving monsoon, before setting out across the Atlantic as a deepening depression. The hurricane is the film’s main character. The supporting cast: the men, women, plants, and animals that it encounters on its journey and affects in some way, for better or for worse. Serene and exquisitely beautiful from space, at ground level in the face of the screaming wind, Hurricane is nothing less than terrifying.
Release Date: December 1, 2016
Available Formats: 2D and 3D, DCI-compliant Digital, IMAX Digital, IMAX Laser, Fulldome Digital
Length: 39:50 and 20:00
Producer: Ouragan Films
Distributor: nWave Pictures Distribution
Contacts: Janine Baker, jbaker@nwave.com; Jennifer Lee Hacket, jleehackett@nwave.com
Website: hurricane.nwave.com
Planetarium Day

**Tuesday, October 24**

The Tech Museum of Innovation, Hackworth IMAX Dome Theater
See the latest in planetarium shows.

**Sponsored by**

**Planetarium Day Schedule**

- **10:00–10:30 a.m.**  
  **Real Time Science with Digistar 6:**  
  A demonstration of the live capabilities of Digistar 6

- **11:25–11:55 a.m.**  
  **Introducing AEOS Theaters:**  
  A revolutionary alliance bringing you the future of giant screen cinema

- **12:50–1:20 p.m.**  
  **Real Time Science with Digistar 6:**  
  A demonstration of the live capabilities of Digistar 6

- **2:15–2:45 p.m.**  
  **Introducing AEOS Theaters:**  
  A revolutionary alliance bringing you the future of giant screen cinema

- **3:40–4:10 p.m.**  
  **Alternative Immersive Content:**  
  A presentation of STEM content in Digistar 6

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**When I think about conducting a visitor experience study, I...**

A. sob quietly at my desk.
2. stare at a blank Excel spreadsheet for an hour.
D. never get further than thinking. I’m too busy!

☐ False  ☑ visit [understandingvisitors.org](http://understandingvisitors.org)

COVES is a collaborative system for collecting and analyzing visitor experience data, built by museums, for museums.

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Product Showcases

SATURDAY, OCTOBER 21

11:30 a.m.–12:30 p.m.
Exhibitions that Excite: Bring a Fresh Audience to Your Museum
Convention Center, Meeting Room 212C
Join key players from the Imagine Exhibitions team for an overview and discussion of a collection of blockbuster traveling exhibitions available now from Imagine Exhibitions, including Hamilton: The Exhibition, Dinosaurs Around the World, Jurassic World: The Exhibition, Discover Steampunk, Downton Abbey: The Exhibition and Plastic Waters.

SUNDAY, OCTOBER 22

1:15–2:15 p.m.
Hands-on Science with Google’s Science Journal App
Convention Center, Meeting Room 212C
Science Journal is a free app for Android and iOS that enables anyone to do fun, hands-on science experiments using their phones and tablets. Come and meet the Science Journal team as we demo the latest version of the app and showcase new educational activities developed by our partners.

MONDAY, OCTOBER 23

2:30–3:45 p.m.
Evans & Sutherland Presents Digistar 6 in 8K
The Tech Museum of Innovation, Hackworth IMAX Dome Theater
See a live presentation of why Digistar 6 is the world’s leading digital planetarium, offering nearly unlimited visual resolution on a dome screen. Industry-leading features include STEAM, the Digistar Cloud Library, Domecasting, and a wealth of astronomical and scientific content, all in a powerful system that is easy to learn and use.

1:00–2:00 p.m.
Mining for Your Mission: Using Your Data to Uncover Hidden Treasure
Convention Center, Meeting Room 212C
Your data is your most valuable asset, but are you using it to its full potential? In this session we’ll focus on the importance of healthy data management strategies, how to create a Culture of Data at your organization, and we’ll leave you with tips to uncovering the three easy-to-find gems that are hiding in your database right now.

MONDAY, OCTOBER 23

4:15–5:15 p.m.
PGAV Master Planning and 3D Visualization: Powerful Tools for Shaping the Future of Your Museum
Convention Center, Meeting Room 212C
Master planning should be more than physical planning. It is an opportunity to imagine and articulate a new vision for your museum with aspirations for new visitors, innovative interpretive experiences, strengthened brand, and increased revenue. PGAV has developed powerful new 3D visualization tools to help your board, staff, and donors align around a common purpose. Senior staff from PGAV Destinations will describe our approach to master planning and show examples of our 3D VIS.
Other Events

SUNDAY, OCTOBER 22

1:00–2:30 p.m.

San Jose Hidden Biotech Tour

Registration: Limited to 16 people; first-come, first-served; sign-up sheet at the World Biotech Tour tower in the Exhibit Hall’s ASTC Resource Center. (Additional tour will be added, 2:45–4:15 p.m., if eight or more people sign up on the wait list in the ASTC Resource Center.)

Departs: Tour leaves promptly from the World Biotech Tour tower in the ASTC Resource Center.

Tour Stops: Four to five locations at local establishments within walking distance of the Convention Center. Tour is wheelchair accessible.

Science is everywhere. See how you can transform your cities into scientific and conversational labs! Let the World Biotech Tour (WBT) guide you on a biotech journey through downtown San Jose. Open your eyes—everything around you can transform into possible exhibits or experiments. Become an explorer and together we will discover the symbiosis of public engagement and urban ecosystems. This is an interactive outreach experience that connects local scientists, community members, and businesses with conference attendees in a unique way to consider the pervasive and often subtle impact of biotechnology in daily life. The tour showcases the WBT’s “Hidden Biotech Scavenger Hunt” and is inspired by the “Porto #LivingLabCities Discovery Tour” at the Ecsite Annual Conference 2017.

Presented by the World Biotech Tour (www.worldbiotech-tour.org), with support from the Biogen Foundation, and produced by Guerilla Science. #SJbiotechtour #WBT2017

7:00 p.m.–10ish

Stand-up Science

Loft Bar and Bistro
90 South 2nd Street

Join us for our annual evening of comedy and cabaret all about science and science centers (yes, really!) performed by, and for, delegates of ASTC 2017. Relax as your friends and colleagues delight and entertain you over drinks and dinner. Free admission; food and bar service available.

Presented by the International Centre for Life, Newcastle upon Tyne, United Kingdom.
The Tech Museum of Innovation is a family-friendly interactive science and technology center located in the heart of downtown San Jose, California. It has become a landmark for visitors seeking a glimpse of the most inventive place on Earth—Silicon Valley.

Thanks to the vision of this institution’s leadership and unwavering support from staff members, volunteers, donors, and patrons, The Tech has grown to be far more than just a museum. It is a valued community resource for education and innovation, one that in 2015 was awarded the National Medal for Museum and Library Service, the highest honor a U.S. museum can achieve.

We are driven by our mission: to inspire the innovator in everyone.

The idea to build a museum devoted to science and technology in the Silicon Valley was formed in 1978 by the Junior League of Palo Alto, which was joined in the effort by the Junior League of San Jose.

Twelve years later, “The Garage” opened on San Carlos Street in the former home of downtown San Jose’s convention center. It quickly became a valuable educational resource for children and young adults.

Eight years later, The Tech moved into a dazzling, 132,000-square-foot (12,250-square-meter) facility designed by Mexican architect Ricardo Legorreta. The building’s distinctive mango and azure color scheme and domed theater are San Jose landmarks.

Today, The Tech welcomes half a million visitors each year. Through programs such as The Tech Challenge, our annual team design competition for youth, and internationally renowned programs such as The Tech for Global Good, which honors people doing work to benefit humanity, The Tech celebrates the present and encourages the development of innovative technology for a more promising future.
ASTC Members in California

Astronomical Society of the Pacific
390 Ashton Avenue
San Francisco
www.astrosociety.org

Bay.org
The Embarcadero at Beach Street
San Francisco
www.bay.org

Bay Area Discovery Museum
557 McReynolds Road
Sausalito
www.bayareadiscoverymuseum.org

Birch Aquarium at Scripps
2300 Expedition Way
La Jolla
aquarium.ucsd.edu

Budd Wentz Productions
8619 Skyline Boulevard
Oakland
www.wentzscope.com

The California Indian Museum
and Cultural Center
5250 Aero Drive
Santa Rosa
www.cimcc.org

California Science Center
700 Exposition Park Drive
Los Angeles
www.californiasciencecenter.org

Chabot Space & Science Center
10000 Skyline Boulevard
Oakland
www.chabotspace.org

Children’s Creativity Museum
221 Fourth Street
San Francisco
www.creativity.org

Children’s Discovery Museum
of San Jose
180 Woz Way
San Jose
www.cdm.org

Children’s Museum at La Habra
301 South Euclid Street
La Habra
www.lhm.org

Cinnabar California, Inc.
4571 Electronics Place
Los Angeles
www.cinnabar.com

Columbia Memorial Space Center
12400 Columbia Way
Downey
www.columbiaspacescience.org

Computer History Museum
1401 North Shoreline Boulevard
Mountain View
www.computerhistory.org

Convergence, LLC
6 Journey, Suite 160
Aliso Viejo
www.convergence.net

Creative Mad Systems Inc.
733 North Main Street
Orange
www.madsystems.com

CuriOdyssey
1651 Coyote Point Drive
San Mateo
www.curiodysssey.org

The Discovery Center for
Science and Technology
5655 Lindero Canyon Road,
Suite 422
Westlake Village
www.discoverycntr.org

Discovery Cube
2500 North Main Street
Santa Ana
www.discoverycube.org

Doubleknot
20665 Fourth Street, Suite 103
Saratoga
hello.doubleknot.com

EHDD Architecture
500 Treat Avenue, Suite 201
San Francisco
www.ehdd.com

Einstellung Labs
Fairfax
www.einstellunglabs.com

Electrosonic, Inc.
2230 North San Fernando Boulevard
Burbank
electrosonicimmersion.com

Elsa Bailey Consulting
Pleasant Hill
www.optimusmr.com

Event Network
9606 Aero Drive, Suite 100
San Diego
www.eventnetwork.com

Exploratorium
Pier 15
San Francisco
www.exploratorium.edu

Explorit Science Center
3141 Fifth Street
Davis
www.explorit.org

Fleet Science Center
1875 El Prado, Balboa Park
San Diego
www.fleetscience.org

Gateway Science Museum
625 Esplanade
Chico
www.csuchico.edu

Global Experience Specialists (GES)
500 North Brand Boulevard,
Suite 1860
Glendale
www.ges.com

Group Delphi
950 West Tower Avenue
Alameda
www.groupdelphi.com
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<th><strong>Gyroscope, Inc.</strong></th>
<th>283 4th Street, Suite 201</th>
<th>Oakland</th>
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<td><strong>4800 Oak Grove Drive</strong></td>
<td><strong>Pasadena</strong></td>
<td><strong><a href="http://www.jpl.nasa.gov">www.jpl.nasa.gov</a></strong></td>
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<td><strong>Kern County Museum</strong></td>
<td><strong>3801 Chester Avenue</strong></td>
<td><strong>Bakersfield</strong></td>
<td><strong><a href="http://www.kcmuseum.org">www.kcmuseum.org</a></strong></td>
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<td><strong>480 North Arroyo Boulevard</strong></td>
<td><strong>Pasadena</strong></td>
<td><strong><a href="http://www.kidspacemuseum.org">www.kidspacemuseum.org</a></strong></td>
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<td><strong>Lawrence Hall of Science</strong></td>
<td><strong>1 Centennial Drive</strong></td>
<td><strong>University of California, Berkeley</strong></td>
<td><strong>Berkeley</strong></td>
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<td><strong>Lick Observatory</strong></td>
<td><strong>29955 Mount Hamilton Road</strong></td>
<td><strong>Mt Hamilton</strong></td>
<td><strong><a href="http://www.ucolick.org">www.ucolick.org</a></strong></td>
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<td><strong>Lindsay Wildlife Experience</strong></td>
<td><strong>1931 First Avenue</strong></td>
<td><strong>Walnut Creek</strong></td>
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<td><strong>Maturango Museum of the Indian Wells Valley</strong></td>
<td><strong>100 East Las Flores Avenue</strong></td>
<td><strong>Ridgecrest</strong></td>
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<td><strong>MOXI The Wolf Museum of Exploration + Innovation</strong></td>
<td><strong>125 State Street</strong></td>
<td><strong>Santa Barbara</strong></td>
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<td><strong>National Ag Science Center</strong></td>
<td><strong>743 Yosemite Boulevard</strong></td>
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<td><strong>agsciencecenter.org</strong></td>
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<td><strong>National History Museum of Los Angeles County/ La Brea Tar Pits Museum</strong></td>
<td><strong>900 Exposition Boulevard</strong></td>
<td><strong>Los Angeles</strong></td>
<td><strong><a href="http://www.nhm.org">www.nhm.org</a></strong></td>
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<td><strong>2801 West Empire Avenue</strong></td>
<td><strong>Burbank</strong></td>
<td><strong><a href="http://www.nwave.com">www.nwave.com</a></strong></td>
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<td><strong>Oakland Museum of California</strong></td>
<td><strong>1000 Oak Street</strong></td>
<td><strong>Oakland</strong></td>
<td><strong><a href="http://www.museumca.org">www.museumca.org</a></strong></td>
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<td><strong>Placer Nature Center</strong></td>
<td><strong>3700 Christian Valley Road</strong></td>
<td><strong>Auburn</strong></td>
<td><strong><a href="http://www.placernaturecenter.org">www.placernaturecenter.org</a></strong></td>
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<td><strong>Sacramento</strong></td>
<td><strong><a href="http://www.powerhousesc.org">www.powerhousesc.org</a></strong></td>
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<tr>
<td><strong>Punt Consulting Group</strong></td>
<td><strong>Redondo Beach</strong></td>
<td><strong><a href="http://www.puntconsulting.com">www.puntconsulting.com</a></strong></td>
<td></td>
</tr>
<tr>
<td><strong>Roseville Utility Exploration Center</strong></td>
<td><strong>1501 Pleasant Grove Boulevard</strong></td>
<td><strong>Roseville</strong></td>
<td><strong><a href="http://www.roseville.ca.us">www.roseville.ca.us</a></strong></td>
</tr>
<tr>
<td><strong>Sacramento Children's Museum</strong></td>
<td><strong>2701 Prospect Park Drive</strong></td>
<td><strong>Rancho Cordova</strong></td>
<td><strong><a href="http://www.sackids.org">www.sackids.org</a></strong></td>
</tr>
<tr>
<td><strong>San Diego Natural History Museum</strong></td>
<td><strong>1788 El Prado, Balboa Park</strong></td>
<td><strong>San Diego</strong></td>
<td><strong><a href="http://www.sdnhm.org">www.sdnhm.org</a></strong></td>
</tr>
<tr>
<td><strong>Santa Barbara Museum of Natural History</strong></td>
<td><strong>2559 Puesta del Sol Road</strong></td>
<td><strong>Santa Barbara</strong></td>
<td><strong><a href="http://www.sbnature.org">www.sbnature.org</a></strong></td>
</tr>
<tr>
<td><strong>The Tech Museum of Innovation</strong></td>
<td><strong>201 South Market Street</strong></td>
<td><strong>San Jose</strong></td>
<td><strong><a href="http://www.thetech.org">www.thetech.org</a></strong></td>
</tr>
<tr>
<td><strong>Thinkwell</strong></td>
<td><strong>695 South Glenwood Place</strong></td>
<td><strong>Burbank</strong></td>
<td><strong><a href="http://www.thinkwellgroup.com">www.thinkwellgroup.com</a></strong></td>
</tr>
<tr>
<td><strong>Turtle Bay Exploration Park</strong></td>
<td><strong>844 Sundial Bridge Drive</strong></td>
<td><strong>Redding</strong></td>
<td><strong><a href="http://www.turtlebay.org">www.turtlebay.org</a></strong></td>
</tr>
<tr>
<td><strong>USS Hornet Museum</strong></td>
<td><strong>707 West Hornet Avenue</strong></td>
<td><strong>Alameda</strong></td>
<td><strong><a href="http://www.uss-hornet.org">www.uss-hornet.org</a></strong></td>
</tr>
<tr>
<td><strong>Virtual Science Center</strong></td>
<td><strong>100 South Murphy Street, Suite 200</strong></td>
<td><strong>Sunnyvale</strong></td>
<td><strong><a href="http://www.virtualsciencecenter.org">www.virtualsciencecenter.org</a></strong></td>
</tr>
<tr>
<td><strong>Western Science Center</strong></td>
<td><strong>2345 Searl Parkway</strong></td>
<td><strong>Hemet</strong></td>
<td><strong><a href="http://www.westerncenternuseum.org">www.westerncenternuseum.org</a></strong></td>
</tr>
<tr>
<td><strong>World of Wonders Science Museum</strong></td>
<td><strong>2 North Sacramento Street</strong></td>
<td><strong>Lodi</strong></td>
<td><strong><a href="http://www.wowsciencemuseum.org">www.wowsciencemuseum.org</a></strong></td>
</tr>
</tbody>
</table>
ASTC 2017 Exhibit Hall Schedule

The ASTC Annual Conference Exhibit Hall strives to provide exhibitors and attendees with increased value and networking opportunities each year.

**Friday, October 20**
8:00 a.m.–5:00 p.m.
Exhibitor Move-In

**Saturday, October 21**
10:45 a.m.–6:15 p.m.
Exhibit Hall Open
12:45–1:45 p.m.
Networking Lunch in the Exhibit Hall
3:15–4:15 p.m.
Exhibit Hall Refreshment Break

**Sunday, October 22**
9:00 a.m.–6:00 p.m.
Exhibit Hall Open
9:00–10:00 a.m.
Beverage Break in the Exhibit Hall
11:30 a.m.–1:00 p.m.
Networking Lunch in the Exhibit Hall
4:30 p.m.–6:00 p.m.
Networking Reception in the Exhibit Hall
6:00 p.m.–10:00 p.m.
Exhibitor Move-Out

**Monday, October 23**
8:00 a.m.–12:00 p.m.
Exhibit Move-Out

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**Artisans of Florence - International Unparalleled Touring Exhibitions**

Our award-winning science exhibitions feature genuine hands-on interactivity and are ideal for STEM learning!

- Da Vinci Machines & Robotics (500 Year Anniversary Edition!)
- Julius Caesar/Ancient Rome
- The Science of Archimedes
- Eureka! An interactive history of science for children

www.ArtisansOfFlorence.com
Sponsors and Exhibitors

360dome.projection, LLC—327
Torrance, California
360dome.projection, LLC, seeks to introduce easy-to-use and cost-effective digital technology—and dynamic programming—to the planetarium industry.

ABA Science Play Ltd.—1029
Tel Aviv, Israel
www.aba-scienceplay.com
ABA Science Play manufactures educational outdoor playground equipment for children to learn about physical laws, the universe, and recycling while playing.

Action Moving Services—933
Burnsville, Minnesota
www.actionmoving.com
Action Moving Services is an award-winning agent for Atlas Van Lines. We provide transportation and storage for exhibits nationally and internationally.

ACTIVE Network—214
Dallas, Texas
www.activenetwork.com
From fast and efficient ticketing to facility management capabilities, ACTIVE Venue Manager is built to help increase visitation, drive engagement, and improve customer experience.

Aeromax, Inc.—1302
Lake Barrington, Illinois
www.aeromaxtoys.com
Aeromax is synonymous with innovation. Selling to science centers and specialty stores around the world. Award-winning, museum-quality merchandise to inspire kids’ imaginations.

Afterschool STEM Hub—921
Washington, D.C.
www.afterschoolstemhub.org
Discover the most effective ways to make the case for expanding and supporting informal STEM learning with free tools based on extensive communications research.

AGT EUROEVENTS Ltd.—927
Nikosia, Cyprus
kotsanas.com
AGT EUROEVENTS presents The High-Tech Inventions of Ancient Greece from the Kotsanas Museum of Ancient Greek Technology in Katakolo and Archimedes Museum in Olympia, Greece.

ALCHEMY Studio—708
Ridgefield, Connecticut
alchemystudio.com
ALCHEMY Studio inspires through master planning, experience and exhibit design and development, film and media concepts, project management, and environmental graphics.

American Museum of Natural History—917
New York, New York
www.amnh.org/global-business-development/traveling-exhibitions
The American Museum of Natural History is one of the world’s preeminent scientific and cultural institutions.

Anatomage—906
San Jose, California
www.anatomage.com
Anatomage is a medical company, driving innovation through advanced solutions in hospitals and educational institutions. Our products include medical tables, surgical devices, and radiology software.

Argyle Design, Inc.—323
Brooklyn, New York
argyledesign.com
From master planning to opening, ADI creates irresistible exhibit experiences for audiences of all ages. Our innovative design solutions and inclusive environments have proven appeal.

Artifact Technologies—932
Seattle, Washington
artifacttech.com
Artifact Technologies creates location-based games and guides that deliver meaningful, relevant content and foster deeper engagement at science centers and museums.

Artisans of Florence-International—1022
Melbourne, Australia
www.artisansofflorence.com

ASM Materials Education Foundation—313
Materials Park, Ohio
www.asmfoundation.org
The ASM Materials Education Foundation provides for the advancement of scientific and engineering knowledge through its support of education and research.

Audio Visual Imagineering, Inc.—925
Orlando, Florida
www.av-imagineering.com
AVI produces and distributes fulldome educational shows for planetarium theaters. We also manufacture the only fulldome (360 x 180) laser system for planetarium theaters.
Get the tips you need to make a great conference proposal for the 2018 ASTC Annual Conference in Hartford, Connecticut, September 29–October 2, 2018.

Creating a Great Conference Session Proposal Brown Bag Lunch
Saturday, October 21 | 1:00 p.m. | Meeting Room 212C
Available Light—829
Salem, Massachusetts
www.availablelight.com
Available Light is an innovative lighting design firm working in the museum exhibition and architecture fields. Leaders in delivering creative, high performance, and sustainable experiences.

Benee’s, Inc.—222
Farmington, Missouri
www.benees.com
Benee’s, Inc., can make any idea that you have come to life for your museum. Whether it be seating, interactive exhibits, or a fitness course.

Betty Brinn Children’s Museum—828
Milwaukee, Wisconsin
www.bbcmkids.org
The Museum is dedicated to providing hands-on educational experiences that help children build fundamental cognitive, social, emotional, and physical skills during their formative years.

Blackbaud, Inc.
Gold Sponsor
Charleston, South Carolina
arts.blackbaud.com
Blackbaud is the world’s leading cloud software company powering social good. Learn more at our website.

Blue Telescope Studios—620
New York, New York
blue-telescope.com
Blue Telescope uses technology, design, and storytelling to craft immersive, educational experiences that blend hands-on interaction with media spectacle.

BODy WorLDS—1032
Beverly Hills, California
www.bodyworlds.com
The original exhibitions featuring real, plastinated human specimens from a body donation program. Animal Inside Out is now available. Exhibits from 5,000 to 10,000 square feet (464 to 929 square meters).

BOSEbuild—532
Framingham, Massachusetts
build.bose.com
BOSEbuild believes that hands-on exploration is the key to sparking a child’s curiosity. When kids build, it does more than teach—it inspires.

Bowen Technovation—409
Indianapolis, Indiana
www.bowentechnovation.com
Since 1985 Bowen Technovation has specialized in technology and interactive production designs for exhibits and planetariums worldwide with over 600 projects completed to date.

BPI—421
Norwood, Massachusetts
bostonproductions.com
Using interactive game design and software development, paired with linear production services and integrated AV systems, we create experiences that are customized, meaningful, and memorable.

Brad Larson Media, Inc.—811
Canton, Massachusetts
www.bradlarson.com
Storykiosk and Storyspaces.io use visitors’ own stories about their experience to connect post-visit. Popup version for community events, and online record via email invitation.

Brixo Inc.—634
Wilmington, Delaware
www.brixotoys.com
Quantum Levitation: Hyperloops and magnetic levitation. BRIXO: chrome-coated building blocks—build electric circuits and bring your creations to life with light, movement, and sensors.

Budd Wentz Productions (Wentzscope Microscopes)—809
Oakland, California
wentzscope.com
WENTZSCOPE Easy-View microscopes for museums. Built for rough public environments. Display opaque or translucent specimens, magnified 10–400x. Video to a screen is also available.

Bursa Science and Technology Center—523
Bursa, Turkey
www.bursabtm.org
BTM Exhibits aims to build scientific thinking skills among children and young adults. We design and produce interactive experimental facilities and exhibition spaces.

BWC Visual Technology—1103
bwcviz.com
BWC Visual Technology is a distributor and licensed re-seller of state-of-the-art, interactive exhibit technology for museums and science centers.

California Science Center—1028
Los Angeles, California
californiasciencecenter.org

CCS Content Conversion Specialists—618
Hamburg, Germany
www.content-conversion.com
The MagicBox is a display case fused with digital presentation, where it’s possible to use interactive animation and tangible 3D renderings directly on an exhibited object.
Meet the 2017 ASTC Diversity and Leadership Development Fellows

Introduce yourself when you see them at the conference—ask them about their work and what they are passionate about!

Roxann Braithwaite-Grant
Sales & Event Representative
Ontario Science Centre
Toronto, Ontario

Ashanti Davis
Exhibits Project Supervisor
Fleet Science Center
San Diego, California

Cesar Cueva
Assistant Manager, Guest Services
Exploratorium
San Francisco, California

Rocheline Deronville
Fee-Based Coordinator
Museum of Discovery and Science
Fort Lauderdale, Florida

Georgina Diaz
Director of Guest Services & IMAX Operations
California Science Center
Los Angeles, California

Eric Godoy
Partnership Programs Coordinator
Denver Museum of Nature & Science
Denver, Colorado

Vincent Iannelli
Exhibit Developer
TELUS Spark
Calgary, Alberta

Lindsay Jones
Director of Operations
Virginia Discovery Museum
Charlottesville, Virginia

Brenda Lopez
Community Education Manager
Thinkery
Austin, Texas

Dana Mahoney
Volunteer Resources Manager
Thinkery
Austin, Texas

Delia Meza
Early Childhood Science Coordinator
New York Hall of Science
Queens, New York

Miguel Ordenana
Coordinator, Citizen Science
Natural History Museum of Los Angeles County
Los Angeles, California

Michelle Rodriguez
Coordinator for Special Initiatives, Director’s Office
Lawrence Hall of Science
Berkeley, California

Yvette Sandoval
Weekend and Front End Manager
Explora
Albuquerque, New Mexico

Meghan Schiedel
Curriculum Developer
Terry Lee Wells Nevada Discovery Museum
Reno, Nevada

Oanh Vu
Teen Tech Crew and Climate Change Crew Manager
Science Museum of Minnesota
St. Paul, Minnesota

www.astc.org/professional-development/conference-fellows
Chicago Scenic Studios Inc.—520
Chicago, Illinois
www.chicagoscenic.com
Chicago Scenic has spent 40 years mastering the complexities of dynamic environments and challenging interactive experiences. Wherever you are in your exhibit development, let’s talk.

Children’s Museum of Houston—1026
Houston, Texas
www.cmhouston.org
Children’s Museum of Houston provides hands-on, inquiry-based STEM traveling exhibits and immersive multimedia game experiences that promote problem-solving and critical-thinking skills.

The Children’s Museum of Indianapolis—729
Indianapolis, Indiana
www.childrensmuseum.org
Dora & Diego: Let’s Explore is available Spring 2018! The Children’s Museum of Indianapolis creates extraordinary learning experiences that enrich the lives of children and families.

Children’s Museum of Pittsburgh—729
Pittsburgh, Pennsylvania
pittsburghkids.org
Children’s Museum of Pittsburgh delights and inspires children. The Museum was named one of the nation’s top 15 children’s museums by Parents magazine in 2015.

Clark Planetarium—415
Salt Lake City, Utah
clarkplanetarium.org/distribution
Clark Planetarium Productions—specializing in fulldome content and interactive exhibit software solutions. Take your museum experience to the next level!

Collaboration for Ongoing Visitor Experience Studies (COVES)—517
Washington, D.C.
www.understandingvisitors.org
COVES is a transformative data service created by museum professionals, helping museums be more effective through collaborative collection, analysis, and interpretation of visitor experience data.

Convergence LLC—814
Aliso Viejo, California
convergence.net
We provide web-delivered integrated ticketing and registration. Ticketing from anywhere—mobile, PC, kiosk, or box office. We offer retail, food and beverage, and inventory control.

Cosmosphere—632
Hutchinson, Kansas
cosmo.org
SpaceWorks is internationally recognized for restoration, exhibit fabrication, and artifact replication. Projects include Liberty Bell 7, Apollo XIII, and F-1 engines recovered by Jeff Bezos.

Creative Discovery Museum—817
Chattanooga, Tennessee
www.cdmfun.org
Creative Discovery Museum is working with the BioEnergy Science Center on a biofuels/alternative energies STEM project called “Farming For Fuels.”

D3D Cinema / Birdly VR—307
Evanston, Illinois
www.d3dcinema.com
D3D offers complete digital cinema solutions and distributes Birdly VR, a virtual reality flight simulator that delivers an immersive flight experience like none before.

Dino-Lite Scopes—1033
Torrance, California
www.dinolite.us
Dino-Lite portable digital microscopes and eyepiece cameras provide high-quality microscopy video interfacing to PCs and Macs. Most models provide 10x–220x magnification.

Discovery Dome (ePlanetarium)—209
Houston, Texas
www.discoverydome.com
Discovery Dome is a fully portable digital theater presenting fulldome planetarium shows and digital starfields. We bring the excitement of museum-quality shows to you!

Doubleknot
Supporting Sponsor
Saratoga, California
hello.doubleknot.com
Online, POS, and mobile sales for ticketing, admissions, memberships, events, day camps, group visits, parties, and more, with a single integrated database for reporting and analytics.

Drug Enforcement Administration Museum—220
Springfield, Virginia
deamuseum.org
Drugs: Costs & Consequences, DEA’s traveling exhibition, is available to science museums wanting to hold conversations about the current heroin/opioid crisis in America.

eliya—321
Jerusalem, Israel
eliya.info
An industrial design studio specializing in outdoor musical play structures.

The Elumenati, LLC—215
Milwaukee, Wisconsin
www.elumenati.com
The Elumenati are a design and engineering firm creating innovative solutions for immersive visualization.
Evans & Sutherland
Computer Corporation—508
Salt Lake City, Utah
www.es.com
Evans & Sutherland is the world’s first computer graphics company and has developed advanced computer graphics technologies for almost four decades.

Everbright By Hero Design—611
Oakland, California
everbright.io
Everbright is an interactive light board composed of hundreds of color dials that can be twisted endlessly in either direction through the color spectrum.

Evergreen Exhibitions—1024
San Antonio, Texas
evergreenexhibitions.com
Evergreen Exhibitions creates educational touring science, natural history, art, and object exhibitions, delivering immersive experiences to museums throughout the world for more than 25 years.

Exhibits Development Group—1014
St. Paul, Minnesota
www.exhibitsdevelopment.com
EDG ignites and promotes cultural exchange by bringing exhibitions of art, science, history, and popular culture to a diverse audience worldwide.

Exploratorium—1003
San Francisco, California
www.exploratorium.edu
The Exploratorium is a public learning laboratory exploring the world through science, art, and human perception. We partner with organizations worldwide to create inquiry-based experiences.

Explorer Systems Inc.—815
Kelseyville, California
www.versai.com
Premier, non-cloud based, all-in-one museum management software includes: school reservations, camp registrations, admissions, memberships, fundraising, grant tracking, real-time e-commerce, CRM, gift shop, and integrated reports.

ExplorMor Labs LLC—333
Mesa, Arizona
www.explormor.com
www.libraries-of-life.org
ExplorMor Labs provides customized augmented reality solutions and interactive learning tools that engage audiences with natural history collections.

The Field Museum of Natural History—1215
Chicago, Illinois
www.fieldmuseum.org
The Field Museum combines research of its world-renowned scientific staff with award-winning design expertise to create traveling exhibitions that offer an exceptional level of service.

FLEXHIBIT—709
Spokane, Washington
flexhibit.com
Through our portable, modular wall system called FlexWall, FLEXHIBIT offers the ability to switch out inspiring STEM content in a highly affordable manner.

Flying Fish Exhibits—820
Victoria, Australia
www.flyingfishexhibits.com
Flying Fish works intimately with museum and science center clientele to take their exhibitions out to a broader, global market.

Foxfire Interactive Corp—616
North Attleboro, Massachusetts
www.foxfireinteractive.com
Producer/distributor of GLOBAL SOUNDSCAPES (NSF-funded) and other interactive movie experiences for your IMAX or fulldome theater. Easy to learn! Fun to deliver!

Gateway Ticketing Systems, Inc.—210
Gilbertsville, Pennsylvania
www.gatewayticketing.com
Gateway Ticketing Systems, Inc., is the world leader in ticketing admission control and revenue generation solutions, services, support, and strategy.

GES
Glendale, California
ges.com
With more than 90 years and the most comprehensive breadth of services and technology, we bring brands and customers closer together through events, exhibits, and exhibitions.

Giant Screen Cinema Association—1203
Holly Springs, North Carolina
www.giantscreencinema.com
GSCA represents the network of educational, life-changing, giant screen cinema experiences worldwide. Members include science centers and museums, filmmakers, distributors, manufacturers, and other related businesses.

Google—1206
Mountain View, California
www.google.com/earth/outreach
Google Earth Outreach empowers you to create positive change for people and the planet with Geo tools.
Grande Exhibitions—911
Black Rock, Australia
www.grandeexhibitions.com
Grande Exhibitions is a traveling exhibition provider that pushes the boundaries of innovation and technology, focusing on delivering maximum value to partners and visitors.

Group Delphi
Silver Sponsor
Alameda, California
www.groupdelphi.com
From trade show booths to museum exhibits, retail installations to fine art prints, if they say it can’t be done, we’re the people to do it.

Guru—432
San Diego, California
theguru.co
Guru partners with cultural institutions to enhance the visitor experience through mobile, AR, and VR.

Gyroscope, Inc.—423
Oakland, California
www.gyroscopeinc.com
We are an award-winning studio of creative designers who work closely with our clients to create innovative learning environments.

Kurt Hüttinger GmbH & Co. KG—833
Schwaig, Germany
www.huettinger.de
Designers and builders of interactive exhibitions.

Ideum—821
Corrales, New Mexico
www.ideum.com
Founded in 1999, Ideum combines emerging technologies with skilled experience design to create compelling interactive exhibits for science centers, museums, and institutions around the world.

Imagination Playground—1115
New York, New York
www.imaginationplayground.org
Imagination Playground is a breakthrough concept that encourages child-directed, unstructured play. The kind of play critical to a child’s intellectual, social, and emotional development.

Imagine Exhibitions, Inc.—1017
Gold Sponsor
Chapel Hill, North Carolina
www.imagineexhibitions.com
Imagine Exhibitions is currently producing and traveling more than 25 unique exhibitions in museums, science centers, aquariums, integrated resorts, and nontraditional venues worldwide.

IMAX Corporation
Silver Sponsor
Los Angeles, California
www.imax.com
IMAX is a pioneer in large-format exhibition and award-winning documentaries. Institutions worldwide partner with IMAX to inspire patrons about the wonders of the universe.

Impact Communications—909
Cleveland, Ohio
impactcommunications.com
Impact Communications is a team of creative thinkers and technical masters, passionate about developing visitor-focused multimedia, videos, apps, augmented reality, interpretive tours, and immersive exhibits.

INDE—229
Culver City, California
www.industry.com
INDE creates products and experiences that inspire, entertain, inform, and educate using Augmented Reality. Since 2011 we have launched 150+ AR systems worldwide.

Interactive Entertainment Group Inc.—412
Supporting Sponsor
Hauppauge, New York
www.interactiveparty.com
Interactive Entertainment Group Inc. is a leader in manufacturing interactive games and VR experiences for museums and science centers around the world. Some attractions include Giant Light Bright, Giant Battleship, Giant Pin Art, and so much more.

Interspectral—902
Norrköping, Sweden
www.interspectral.com
Interspectral develops unique interactive learning experiences based on x-ray scans.

INTERVOKE—315
Denver, Colorado
www.intervoke.com
INTERVOKE is composed of a variety of industry experts experienced in 3D visualization, forensics, software deployment, augmented and virtual reality design, and execution.

KaBOOM!—515
Washington, D.C.
kaboom.org
The well-being of communities starts with the well-being of kids. KaBOOM! works to ensure all kids get a childhood filled with play so they can thrive.

Kaleido Entertainment—1229
Kaleido Entertainment sold 252,000 tickets sold in the past three years. Our team created the Game Creator, the most popular Hungarian musical show ever.
The Kavli Foundation
Gold Sponsor
Los Angeles, California
www.kavlifoundation.org
The Kavli Foundation is dedicated to advancing science for the benefit of humanity, promoting public understanding of scientific research, and supporting scientists and their work.

Kubik Maltbie, Inc.–627
Mt. Laurel, New Jersey
www.maltbie.com
Kubik Maltbie, Inc., is an experienced museum exhibit fabricator. The technical knowledge of our team is unrivaled, with an impressive portfolio of over 350 projects.

Laminar Sciences Corp.—636
Los Altos, California
www.laminarsciences.com
Laminar Sciences Corp. sells a unique, multi-colored, rheoscopic fluid to the scientific and arts communities. We also directly (or reference) sell exhibits using our fluid.

Laser Fantasy—929
Bellevue, Washington
www.laserfantasy.com
Laser Fantasy produces laser light shows for science centers, theme parks, events, and custom projects—combining art and technology to entertain audiences the world over.

Los Alamos National Laboratory
Bradbury Science Museum—522
Los Alamos, New Mexico
www.lanl.gov/museum
Creates free, traveling STEM exhibits on the Lab’s world-changing work and partners with you on content. This year’s exhibit offering: The Ribosome Machine.

Luci Creative—915
Lincolnwood, Illinois
www.lucicreative.com
Luci Creative is a multidisciplinary studio that develops, designs, and produces compelling exhibits and spaces for museums and cultural institutions.

Luckey LLC—710
Killingworth, Connecticut
www.luckeyclimbers.com
Luckey LLC is a bespoke design-build firm specializing in creating unique and imaginative climbing structures for children-oriented institutional and commercial clients.

Magna-Tech Electronic—903
North Miami, Florida
Konica Minolta Planetarium Co., along with Magna-Tech Electronic Co., will be showing examples of our Fulldome Digital and Optical-Mechanical planetarium technologies.

Minnesota Children’s Museum—728
St. Paul, Minnesota
www.mcm.org/travel
MCM is the leading producer of children’s traveling exhibits for museums. Visit our booth for a special announcement about our newest traveling exhibit!

Minotaur Mazes—1020
Seattle, Washington
www.minotaumazes.com
Minotaur Mazes creates immersive traveling exhibitions—unique learning adventures bursting with interactive challenges. Topics include aerospace, brain games, butterflies, dinosaurs, rainforests, and clean water.

Modular Robotics—335
Boulder, Colorado
www.modrobotics.com
Cubelets Robot Blocks from Modular Robotics are a fast and easy way to inspire kids to become better thinkers.

Morey Consulting—923
Mount Pleasant, South Carolina
moreyconsulting.com
We partner with science centers to provide in-depth reports with information on how to maximize attendance, membership, and revenue potential.

Museum of Science—427
Boston, Massachusetts
www.mos.org
New England’s most attended cultural institution, the Museum of Science, Boston, annually introduces 1.5 million visitors to STEM education via interactive exhibits, programs, and curriculum.

Museum of Science and Industry—1219
Chicago, Illinois
www.msichicago.org
Traveling exhibits for rent.

NASA - Exploration System Directorate—509
Marshall Space Flight Center, Alabama
www.nasa.gov/content/j2m-getting-to-mars-sls-and-orion
NASA’s Exploration Systems Development (Space Launch System, Orion, and Ground Systems) is developing the capability for humans to conduct deep space exploration missions.

NASA Headquarters—1007
Greenbelt, Maryland
www.nasa.gov
NASA carries out scientific exploration and charts the best route of discovery to reap the benefits of Earth and space exploration for society.
NISE Network—527
St. Paul, Minnesota
www.nisenet.org
National Informal STEM Education Network is a community of informal educators and scientists dedicated to supporting learning about STEM across the United States.

NOAA, National Oceanic and Atmospheric Administration—835
Washington, D.C.
www.noaa.gov
NOAA’s mission is to understand and predict changes in the Earth’s environment, and to conserve and manage our coastal and marine resources.

The North Carolina Arboretum—1202
Asheville, North Carolina
www.ncarboretum.org
The North Carolina Arboretum’s traveling exhibits, Making Scents and Wicked Plants, blend science, culture, and natural history to create dynamic, family-friendly experiences.

nWave Pictures Distribution—614
Burbank, California
www.nwave.com
nWave Pictures Distribution is the sales and marketing arm of nWave Studios, a fully integrated digital 3D feature animation studio based in Belgium.

Omaha Children’s Museum and Kraemer Design & Production, Inc.—1129
Omaha, Nebraska
www.ocm.org
www.kd-p.com
Omaha Children’s Museum’s Forever Forest exhibit showcases how we live, work, and play in the natural resource we call the forest. Designed by Kraemer Design.

Ontario Science Centre—1127
Toronto, Ontario, Canada
www.ontariosciencemuseum.ca
For 45+ years, our services have included design and fabrication of engaging, interactive science exhibits, consulting, development, and touring traveling exhibitions.

Oregon Museum of Science and Industry—1117
Portland, Oregon
omsi.edu/yourexit
OMSI creates highly engaging, hands-on interactives, presenting science education to audiences of all ages through our traveling exhibits and consulting services.

Pacific Studio—533
Seattle, Washington
www.pacificstudio.com
Pacific Studio creates exhibits for museums, science centers, visitor centers, and public spaces.

Pathfinders Design + Technology—629
Victoria, British Columbia, Canada
www.pathfindersdesign.com
Pathfinders makes hands-on educational materials for STEM maker/tinkerer spaces and outreach science programs, as well as cool science kits for the museum store!

PGAV Destinations
Gold Sponsor
St. Louis, Missouri
www.pgavdestinations.com
We are designers, architects, artists, master planners, and strategists devoted to creating experiences that will inspire and empower guests to change the world.

Premier Exhibitions Inc.—1027
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www.premierexhibitions.com
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