Welcome

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Association of Science and Technology Centers
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Association of Science and Technology Centers

ASTC
- Founded in 1973
- 700 members, including 500 science and technology center and museum members
- Based in North America, with global members in 48 countries

Our Members
- Science and technology centers
- Natural history museums
- Children's museums
- Nature centers
- Aquariums
- Planetariums
- Zoos
- Botanical gardens
- Nonprofits
- Companies
- Consultants
- Organizations that share an interest in science learning and engagement
Our Vision

Increased understanding of—and engagement with—science and technology among all people
The Work of Our Members

Support Lifelong Science Learning

Connect Science and Society

Engage Diverse Communities

Partner To Tackle Global and Local Challenges
“Lifelong STEM Engagement”

The LIFE Center: Stevens, R. Bransford, J. & Stevens, A. (2005)
Takeaways from *Encountering Science in America*

1. There is a diverse and expanding range of opportunities for people to encounter science, from visiting science centers and attending science events to participating in scientific research or engaging online.

2. More social science research is needed to understand the impacts of science communication and engagement, including on public interest in, understanding of, and support for science.

3. Understanding participant motivations is a critical component of effective science communication and engagement.
Understanding Cumulative Impact

From *Encountering Science in America* (American Academy of Arts and Sciences, 2019)
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Visiting Science

Percentage of U.S. Adults, Age 18 or Older, Who Reported Visiting These Institutions at Least Once During the Last 12 Months:

From *Encountering Science in America* (American Academy of Arts and Sciences, 2019)
Engaging millions of visitors per year

76 million visits in U.S.

108 million visits worldwide

SOURCE: Science Center Statistics—2018. ASTC Annual Membership Survey
Annual visits to selected science engagement organizations

**Zoos and Aquariums**
- 217 U.S. zoos and aquariums accredited by AZA
- 195 MILLION annual visits\(^{31}\)

**Science Centers and Museums**
- 401 U.S. members of the Association of Science and Technology Centers
- \(~80\) MILLION annual visits\(^{32}\)

**National Parks**
- 60 U.S. National Parks
- 331 MILLION annual visits\(^{33}\)

From *Encountering Science in America* (American Academy of Arts & Sciences, 2019)
For comparison

- Div I Football & Bball: 65 million (2017-18)
- 68 million (2019)
- 22 million (2018-19)
- 22 million (2018-19)
- 17 million (2018)
- 21 million (2019)
- 14 million (2019)
- 11 million (2019)
- Broadway theatres: 15 million (2018-19)
Engaging the public in STEM

Science centers offer exhibits, programs, and other activities across science

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Change / Biodiversity / Energy</td>
<td>85 %</td>
</tr>
<tr>
<td>Girls / Women / Gender Equity in Science</td>
<td>80 %</td>
</tr>
<tr>
<td>Entrepreneurship / Creativity / Innovation / Design Thinking</td>
<td>79 %</td>
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<tr>
<td>Computer Science / Data Science</td>
<td>77 %</td>
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<tr>
<td>Mathematics</td>
<td>77 %</td>
</tr>
<tr>
<td>Biotechnology / Health / Medicine</td>
<td>75 %</td>
</tr>
<tr>
<td>Contributions of Underrepresented Groups to Science</td>
<td>74 %</td>
</tr>
<tr>
<td>Food / Drinking Water</td>
<td>73 %</td>
</tr>
<tr>
<td>Lead or participate in local/regional STEM ecosystems</td>
<td>69 %</td>
</tr>
<tr>
<td>Artificial Intelligence / Automation</td>
<td>57 %</td>
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</tbody>
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**SOURCE:** Science Center Statistics—2018. ASTC Annual Membership Survey
Broadening the reach of public engagement in science

Our community is partnering with agencies with an interest in engaging the public on scientific issues.
Held in-person conversations in 2019 and 2020
Previous conversations

- Expanded the conversation on potential to incorporate public engagement with science in more areas
- Lifted up some additional funding opportunities for science centers and museums
- Helped provide connections between museums and Federal agencies and between individual museums
- Identified opportunities to partner with local facilities, laboratories, etc.
- Identified areas of science for which public engagement would be helpful
Panel Discussion

Current and future opportunities in STEM education and engagement
Today’s Panel

**Frank Niepold**, Senior Climate Education Program Manager and Coordinator, Climate Program Officer, National Oceanic and Atmospheric Organization

**Kris Brown**, Deputy Associate Administrator for STEM Engagement, National Aeronautics and Space Administration

**Evan Heit**, Acting Deputy Assistant Director, Directorate for Education and Human Resources, National Science Foundation

**Tony Beck**, Program Director, Center for Research Capacity Building, National Institute of General Medical Sciences, National Institutes of Health
Join us for #ASTC2022

www.astc.org/2022

REGISTER NOW

Hosted by the Carnegie Science Center and Children’s Museum of Pittsburgh
Thank you!