Thank you for supporting X-STEM San Diego, a program of the USA Science & Engineering Festival.

X-STEM San Diego was held on April 18, 2023 at the San Diego Convention Center. The free conference presented by the U.S. Space Force - was designed to showcase diversity and inspire middle and high school students about careers in the STEM fields.

The all day event, emceed by the Hip Hop M.D. Maynard Okereke, featured multiple presentation sessions given by top STEM role models covering a broad range of topic areas including oceanography, aerospace engineering, molecular biology, cybersecurity, and green energy. Each presentation was followed by a Q&A session, giving students the opportunity to directly interact with speakers.

Five interactive workshops were sponsored by General Atomics Sciences Education Foundation, General Dynamics NASSCO, and the U.S. Air Force. Additional organizations providing workshop content include CREATE at UC San Diego and the San Diego Sheriff’s Department. Workshop topics included forensics, electromagnets, robotics, chemistry, and ship design and shipbuilding. Most students had the opportunity to view four speakers on the main stage and participate in one hands-on workshop.

During lunch, students visited tables hosted by our partner organizations, gathered for group photos in the branded photo stations, and mingled with speakers. The San Diego Convention Center helped to keep this event free by allowing students to bring their lunches and by providing the Sails Pavilion as an eating space. American Airlines provided a team of employees who generously gave their time to volunteer for the day.

The 2023 X-STEM San Diego conference marked the event’s return to the region for the second consecutive year. Over 2,100 students attended the event from San Marcos to downtown San Diego.

To prepare the student attendees, we produced this video to inform them of the event format, venue guidelines, and to build anticipation and excitement for X-STEM.

View and download photos from X-STEM San Diego here. A list of participating speakers and workshop presenters can be found below.
Speakers

Allison Cusick, Polar Biologist and Expedition Guide
How an Aspiring Astronaut Became a Polar Oceanographer

Caitlin Delmore, Cloud Security Engineer
Securing Your Future

Dr. Beata Mierzwa, Molecular Biologist and Science Artist
Combine Your Passions - Art in Science & Creativity in STEM

John Smith, Sr. Director of Engineering and Projects, General Atomics
Is FUSION Power the Holy Grail to Carbon Free Green Energy?

Space Force “It’s Real”

Roy Moye III, The Singing Engineer, Founder & CEO of STEMusic
How STEM Made My Dreams Come True!
X-STEM San Diego Workshop Presenters

Meddling in Matter & Magnetism - Sometimes a Repulsive Adventure!
HOSTED BY

Evidence Advocates: Leveraging Technology and Forensic Science
HOSTED BY

The Art of Ship Design and Shipbuilding
HOSTED BY

Edwards Air Force Base Explosive Ordnance Disposal Flight
HOSTED BY

Bouncy Balls
HOSTED BY
**BREAKDOWN OF REGISTERED ATTENDEES BY GRADE LEVEL**

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS (grades 6-8)</td>
<td>55%</td>
</tr>
<tr>
<td>HS (grades 9-12)</td>
<td>45%</td>
</tr>
</tbody>
</table>

**BREAKDOWN OF REGISTERED ATTENDEES BY SCHOOL TYPE**

<table>
<thead>
<tr>
<th>School Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>91%</td>
</tr>
<tr>
<td>Private School</td>
<td>3%</td>
</tr>
<tr>
<td>Charter or Science Magnet</td>
<td>6%</td>
</tr>
</tbody>
</table>

86% of registered attendees were from Title 1 schools

**BREAKDOWN OF REGISTERED ATTENDEES BY GENDER**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>50%</td>
</tr>
<tr>
<td>Male</td>
<td>49%</td>
</tr>
<tr>
<td>Prefer not to say*</td>
<td>1%</td>
</tr>
</tbody>
</table>

**BREAKDOWN OF REGISTERED ATTENDEES BY ETHNICITY**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>10%</td>
</tr>
<tr>
<td>Hispanic or Latina/Latino</td>
<td>47%</td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>1%</td>
</tr>
<tr>
<td>White</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Prefer not to say*</td>
<td>14%</td>
</tr>
</tbody>
</table>

*Some educators noted they did not know the ethnicities and/or gender of the attendees at the time of registration.

**PROMOTION AND SOCIAL MEDIA**

X-STEM was promoted heavily on our website and to our newsletter list of 100k teachers and parents.

Priority invitations were extended to Title 1 schools to provide the best possible opportunity for students from underserved communities to attend. Overall outreach included 91 schools across San Diego County made up of public, charter, and private schools.

The event and speakers were heavily promoted across all of our social media platforms. Speakers, workshop presenters, and partners also touted their participation on social media. With a goal to engage the audience and increase awareness, we encouraged attendees to share their experience during the event using #XSTEM.

The following page illustrates the campaign and reach through our partners and on social media.
X-STEM San Diego By the Numbers

REACH ON USASEF SOCIAL MEDIA, WEBSITE, EMAIL & NEWSLETTER

98.5K Impressions

INSTAGRAM/TWITTER ACCOUNTS WHO SHARED X-STEM:

@sdsheriff (IG) - 21.7K
@hiphopscienceshow (IG) - 16.5K
@womanscientist (IG) - 10K
@SDSheriff (TW) - 68.4K

EDUCATOR QUOTE:

“The presenters had great personalities and were positive and engaging.”

X-STEM San Diego Stats:

2,100 students, teachers, and parents attended

91% thought X-STEM was an effective way to get students more interested in STEM

86% of students in attendance were from Title 1 schools

Sample Posts & News Coverage

KUSI Good Morning San Diego Clips

Featuring Maynard and U.S. Air Force workshop

Watch Here

Featuring Maynard and General Atomics workshop

Watch Here
ATTENDEE QUOTES

**Educator from Wangenheim Middle School:** “Thank you very much for the X-STEM event yesterday! Our students really enjoyed it, and it was very well organized. All the helpers you had made a big difference.”

**Educator from Montgomery Middle STEAM Magnet School:** “Thank you for the field trip. We had a great time!”

**Student from Nativity Prep Academy:** “It was great overall everything was well organized and the speakers were amazing.”

**Educator from Innovation Middle School:** “The staff/volunteers were friendly and knowledgeable. The presenters had great personalities and were positive and engaging. The conference was well organized.”
Scenes From Around X-STEM San Diego