

Recap Report

APRIL 19, 2022

SAN DIEGO CONVENTION CENTER



HOSTED BY:
Maynard Okereke
Hip Hop M.D.



PRESENTED BY



SCIENCES EDUCATION FOUNDATION
GENERAL ATOMICS

illumına







PRESENTED BY







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

X-STEM San Diego was held on April 19, 2022 at the San Diego Convention Center. The free conference - presented by <u>General Atomics Sciences Education Foundation</u>, <u>Illumina</u> and <u>Infineon</u> - was designed to showcase diversity and inspire middle and high school students about careers in the STEM fields.

The all day event, emceed by Hip Hop M.D. <u>Maynard Okereke</u>, featured multiple presentation sessions given by top STEM role models covering a broad range of topic areas including space, aviation, wildlife conservation, and genomics. Each presentation was followed by a Q&A session, giving students the opportunity to directly interact with speakers. Five hands-on and interactive workshops were hosted by leading STEM-focused organizations. Workshop topics ranged from DNA extraction to light spectroscopy to a STEAM-oriented game show. Students had the opportunity to sit in on four speaker presentations and one hands-on workshop. A list of participating speakers and workshop presenters can be found below.

Nearly 2,000 students, teachers, and parents attended the event from Oceanside to San Ysidro. Dr. Peter Farrell generously provided transportation for hundreds of students and provided parking for all of the buses that brought students to the event.

The X-STEM San Diego conference marked the Festival's first return to in-person programming since the start of the COVID-19 pandemic.

View and download photos from X-STEM San Diego here.

Report Date: May 5, 2022

Speakers



Kevin J DeBruin, Former NASA Rocket Scientist & Space Educator **To NASA & Beyond**



Janina Jeff, Ph.D., Senior Bioinformatics Scientist at Illumina The Genome is Life's Greatest Storyteller



David "Mr. D" Landix & LaMar "Mr. Q-U-E" Queen Music Notes STEM Concert



Debra Roy, Staff Engineer, General Atomics Aeronautical Systems, Inc. Welcome Address



Mrinalini Erkenswick Watsa, Ph.D., San Diego Zoo Wildlife Alliance Scientist DNA Hunters: The Future of Conservation Science



Chuck Wright, *Vice President of General Atomics Aeronautical Systems* **Manned and Unmanned Aviation: Is Convergence Coming?**

Workshop Presenters

Gene-ius Games

illumina + Generation STEAM Lungs: The Balloons that Help you Breathe!

What Does Strawberry DNA Look Like?

BE GS Meddling in Matter & Magnetism -Sometimes a Repulsive Adventure!

What Can We Learn From Light?



BREAKDOWN OF REGISTERED ATTENDEES BY GRADE LEVEL

ES (grades 5 and lower)	2%
MS (grades 6-8)	25%
HS (grades 9-12)	67%
18 and over	6%

BREAKDOWN OF REGISTERED ATTENDEES BY SCHOOL TYPE

Public School	43%
Private School	6%
Charter or Science Magnet	30%
Other	2%
Home School	20%

^{*51%} of public school groups registered are Title 1 schools

BREAKDOWN OF REGISTERED ATTENDEES BY GENDER

Female	40%
Male	45%
Other	1%
Prefer not to say*	14%

BREAKDOWN OF REGISTERED ATTENDEES BY ETHNICITY

Asian	7%
Black or African American	5%
Hispanic or Latina/Latino	43%
Native American or Alaskan Native	0%
Native Hawaiian or other Pacific Islander	1%
White	19%
Other	4%
Prefer not to say*	21%

^{*}Many educators with large groups noted that they did not know the ethnicities and/or gender of the attendees at the time of registration.

ATTENDEE FEEDBACK

85% of attendees said they would attend X-STEM again in the future.

94% of attendees think X-STEM was an effective way to get students more interested in STEM.

PROMOTION AND SOCIAL MEDIA

X-STEM San Diego was promoted heavily on our website and to our newsletter list of over 100k teachers and parents. To enhance our outreach efforts regionally, we implemented a highly targeted Facebook advertising campaign and conducted direct outreach to teachers and administrators of San Diego County schools.

Priority invitations were extended exclusively to Title 1 schools to provide the best possible opportunity for students from underserved communities to attend. Overall outreach included 215 schools across San Diego County made up of public, charter, and private schools.

The combination of direct outreach to schools and Facebook advertising resulted in the event exceeding our capacity goal of 1800 students.

A media advisory was sent to nine local news outlets. The event was covered by ABC 10News San Diego. The segment aired multiple times the day of the event and was also featured on four outlet's calendars. The full segment can be viewed here.



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 for the program, we encouraged attendees to share about their experience during the event using #XSTEM.

Promotional offers extended to our audience included a free <u>Diversity In STEAM</u> Magazine subscription and a 20% discount to attend Kevin J DeBruin's <u>Space Class</u>.

The following page illustrates the campaign and reach through our partners and on social media.

X-STEM San Diego Media Reach

REACH ON USASEF SOCIAL ACCOUNTS & NEWSLETTER

293K Impressions

INSTAGRAM ACCOUNTS WHO SHARED X-STEM SAN DIEGO:

Kevin J DeBruin - @kevinjdebruin: 19.3K Hip Hop M.D. - @hiphopscienceshow: 14.9K The Stylish Housewife - @thestylishhousewife: 11.2K

Dr. Janina Jeff - @djaysquared: 2,940

Music Notes - @musicnotesonline: 2,377

Mr. Q-U-E - @mrq_u_e: 2,304

Mr. D - @mrdmusicnotes: 1,376

Mrinalini Watsa - @surroundscience: 583

FB Ad Statistics:

3

Number of ads

94K

Impressions from ads

704

Clicks to registration page

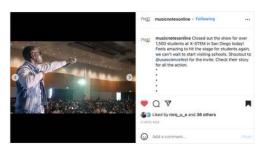
Sample Posts

















Scenes From Around X-STEM San Diego























ATTENDEE QUOTES

Public High School Educator: "I was observing on behalf of the Poway Unified School District and Mt. Carmel High School and after attending this amazing conference I can confirm that your students will indeed enjoy this conference! I look forward to bringing my own students next time and potentially creating a field trip for all of them so they are able to explore the STEM field from a different and more intriguing perspective."

Parent from High Tech Middle Media Arts: "My son, a 6th grader, has a mixed view of STEM related content- he is more of a performer and less of a "science" kind of kid— he was engaged with seeing science with real-world applications. We have had discussions after X-STEM that showed he can see ways he might like to be connected with science and technology in his future. It definitely helped broaden his vision for his future and help him see other possibilities for career options."

Parent from Chula Vista Hills: "I took my 15 year old daughter to this conference. She loves math but doesn't know what career she wants to do with it. She loved all of the presenters and the practical things that they shared. She got to talk to people that were interested in math and they gave her ideas of how to pursue math in the future. Also the content connected well with the topics that she has been learning about in high school."

Parent from St. Therese Academy: "I'm a mother and a scientist. Our school was on spring break so I brought my own 7th graders and their friends to the event. It was fantastic! The kids were very engaged and really loved the lab! I wish I had a rapping science and math teacher in my middle school when I was a kid! I didn't find my love of science until I was in college!"

King Chavez Community High School Student: "I really enjoyed learning more about STEM. I never actually knew about what it was and what people in that field do, getting insight really helped me understand. I wish we did have more time for questions but it was an unforgettable experience. I definitely plan on going again if I have the opportunity to."

Educator from King Chavez Community High School: "Our Students truly enjoyed Dr. Watsa and her work. All of the speakers were fantastic, but Dr. Watsa's was fascinating and captivated our kids. She was quite personable as well, our students got to speak with her after the workshops and she was very helpful and informative."

Educator from High Tech High Media Arts: "The X-STEM Conference gave my students a chance to experience different techniques in Science and Engineering that they might not normally have had the chance to do. It was a great experience for my high school freshmen. They walked away with so many new ideas!"

