









# Virtual Interactive Speaker Series

RECAP REPORT





Thank you for supporting **X-STEM All Access**, a program of the USA Science & Engineering Festival.

X-STEM All Access was broadcast live on May 13-15 and May 18-19, 2020. The free virtual interactive conference series, presented by <u>AstraZeneca</u>, was designed to inspire students about careers in the STEM fields with the ultimate goal to help bridge the STEM workforce gap.

The online conference was presented as a series of five daily 60-minute livestream events, each one featuring multiple STEM role models centered around a shared topic. The program was targeted to students in middle and high school (grades 6-12), but kids and adults of all ages were welcome to attend the livestream events. All five live events were immediately made available for on-demand viewing at no cost.

More than 67,000 students, teachers, parents, military families, and STEM enthusiasts registered to attend the five-day conference series. Many of the registrants were educators who incorporated the program into their distance learning curriculum.

Attendees were encouraged to participate in Q&A sessions during each livestream and were given the opportunity to provide questions in advance and during the program using an online form. Several of the programs featured video questions that were pre-submitted by kids and targeted to specific speakers.

To further engage students and help educators better utilize the program as an educational resource, we provided educators with speaker-specific worksheets to use as classroom tools.

X-STEM All Access featured some of our nation's top STEM role models covering a broad range of topic areas and representing top life science universities, high tech, and life science corporations, non-profit organizations, and governmental agencies.

We partnered with <u>Passage Productions</u> to deliver high-quality and professional programming.

#### X-STEM ALL ACCESS

## **Speaker Lineup**









Moderated by **Justin Shaifer**, Science Educator & Communicator

#### Shattering STEM Stereotypes

**Dr. Knatokie Ford**, Biomedical Scientist & Social Entrepreneur **Kim Swennen**, Google Software Engineer & Former Actress





#### **Ambassadors of Conservation & the Climate**

**Dr. Katharine Hayhoe**, Atmospheric Scientist **Dr. Mireya Mayor**, Primatologist, Explorer, Author & TV Host with a special appearance by Former Vice President **Al Gore** 







#### **Exploring our Planet**

**Dr. David Gallo**, Oceanographer, Senior Advisor for Strategic Initiatives at RMS Titanic Inc.

**Jill Heinerth**, Underwater Cave Explorer, Filmmaker, Photographer & Author





#### **Science that Saves Lives**

**Dr. Mika Sovak**, Medical Oncologist & Drug Discoverer **Dr. Greg Gage**, Neuroscientist & Entrepreneur with special appearances by **Dr. Anthony Fauci**, NIAID Director & **Dr. Francis Collins**, NIH Director









## **Life Beyond our World**

Christina Hammock Koch, NASA Astronaut

Bobak Ferdowsi, NASA JPL Systems Engineer
with a special appearance by Dr. Jessica Meir, NASA Astronaut







#### BREAKDOWN OF REGISTERED ATTENDEES BY REGION

Greater Washington DC 40,967 (62% - includes DC, MD, VA)

 Northeast
 11,150 (17%)

 West
 5,272 (8%)

 Southeast
 4,818 (7%)

 Midwest
 2,577 (4%)

 South
 1,113 (2%)

We also had representation from 59 countries including Algeria, Australia, Bahrain, Barbados, Belgium, Botswana, Brazil, Burundi, Cambodia, Canada, Chile, China, Costa Rica, Czech Republic, Denmark, Ecuador, Egypt, Eswatini (Swaziland), France, Germany, Ghana, Greece, Guatemala, Honduras, Hong Kong, India, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kenya, Malaysia, Mexico, Moldova, Nepal, New Zealand, Nicaragua, Nigeria, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Poland, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sri Lanka, Taiwan, Tanzania, Thailand, Trinidad and Tobago, Turkey, United Arab Emirates, and the United Kingdom.

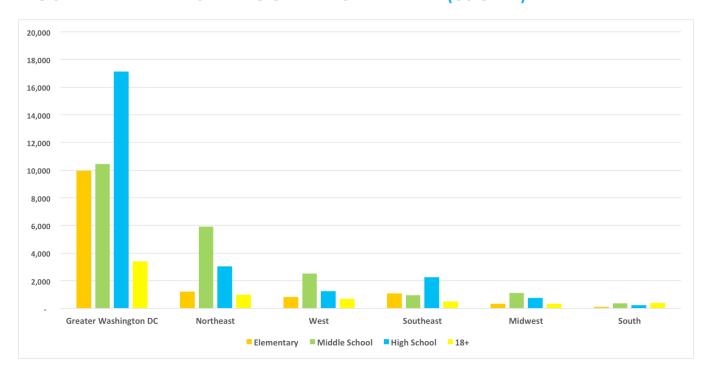
#### BREAKDOWN OF REGISTERED ATTENDEES BY GRADE LEVEL

ES (grades 5 and lower) 21%
MS (grades 6-8) 32%
HS (grades 9-12) 37%
18 and over 10%

#### BREAKDOWN OF REGISTERED ATTENDEES BY SCHOOL TYPE

Public School 58%
Private School 20%
Science Magnet 13%
Home School 6%
Other 3%

#### **REGISTERED ATTENDEES BY REGION AND GRADE LEVEL (US ONLY)**



#### **ATTENDEE FEEDBACK**

#### On a scale of 1-10, how would you rate X-STEM All Access overall?

(One = poor, Ten = fantastic)

Ten	54.5%
Nine	21.4%
Eight	16.3%
Seven	4.7%
Six	1.2%

Do you think X-STEM All Access was an effective way to get you and/or your students more interested in the sciences/engineering?

Yes	82.6%
To a certain extent	15.5%

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#### PRESS COVERAGE

We circulated the event press release to 3,000 National and Washington, D.C. reporters. See the links below for press coverage.

Romper, 550K UVPM

Toy Insider, 4K UVPM

Chesapeake Family, 300K UVPM, 36K Print

LA Parent, 75K UVPM, 50K Print

Business Record, 10K UVPM, 8K Print

Atlanta Parent, 14K UVPM, 100K Print

**Motherhood Moment Blog** 

NBC4, 1M UVPM

**ADA Fruit Daily** 

Macaroni Kid

ABC7 Online Los Angeles, 1.6M UVPM

NIH Director's Blog 500K UVPM

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#### **SOCIAL MEDIA**

The event and speakers were heavily promoted across all of our social media platforms. Speakers and their organizations also touted speaker participation on social media. During the event, we launched a social media campaign called Show Us How You STEM with a goal to engage our audience and increase awareness for the program. The following pages illustrate the campaign and the event reach on social media.

## X-STEM All Access Social Media Reach

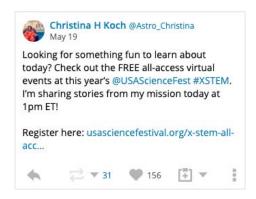
### **#XSTEM**

Facebook, Twitter, Instagram & LinkedIn:

## 5.5 million impressions\*

\*Impressions generated from Keyhole

#### **SAMPLE SOCIAL POSTS:**







## #ShowUsHowYouSTEM Campaign



## X-STEM All Access Media Reach

## 4.1 million impressions

**NOTABLE MEDIA MOMENTS** 

## NBC4



#### **1M UVPM**

## National Institutes of Health Director's Blog **Dr. Francis Collins**



**500K monthly reach** 

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#### **ATTENDEE QUOTES**

Educator in Zimbabwe: It was my first time to attend the virtual X-STEM All Access conference all the way from Zimbabwe. It was an eye-opener as an educator of the need to introduce STEM concepts to my learners at a tender age within our education curriculum. I was motivated to start a STEM Club which is something new within our region. I had twenty-six Grade six students who viewed each program from the beginning to the end. They were fascinated, they got challenged, their minds were stretched beyond the scope of our borders, they shared their X-STEM All Access experience with their peers and school mates and their future was challenged in terms of career choices and surely they will never be the same again. Hats off to the organizers and presenters for a job well done!!! You are impacting positively to our young learners, not only in the United States but here in Africa and right here in Zimbabwe. May the vision and the mission of X-STEM remain alive."

Parent in San Marcos, CA: "My 12 year old son attended this because I thought it would be an "enrichment" to add onto his online school (due to quarantine). I had zero intention of watching it myself. But I was IMMEDIATELY sucked in by Mr. Fascinate and just continued to stay sucked in by the guests. I mean seriously, I thought the whole thing was riveting. What an amazing opportunity for students! You couldn't have got more top tier as far as speakers and the wide range of professions highlighted was great. I was blown away."

**Educator from Washington, DC**: "Loved loved loved X-STEM! Thank you. Our field trip was canceled, yet the virtual option turned out to be so fantastic. Thank you for creatively solving this problem. X-STEM gave me hope for humanity. Something I need right now."

**High School Student from Nashville, TN**: "The X-STEM all-access experience was really encouraged, entertaining (especially the brain breaks) and was uplifting, considering the current situation, to me."

**Educator from Brooklyn, NY**: "As an educator, I am very thankful for my students being able to "interact" with speakers they would otherwise not ever have access to. My students were most impressed with the career transitions of some of the presenters. During our post-event discussions, they also appreciated the exposure to career fields that they were not even aware of -- and the importance of communication skills for every career -- the importance of being able to 'tell your story'."

Parent from Silver Spring, MD: "A parent from my daughter's school sent me the link. My children and I really like Mr. Fascinate. He was very dynamic and interesting. Each visitor and presentation was indeed fascinated. We wish that we could have more shows like X-STEM where students can see how fun STEM can be. Thanks, AstraZeneca!"

**Middle School Student from Durant, OK**: "X-STEM All Access was amazing and very educational! Every day that it was on I would wait in anticipation for the videos. There were multiple speakers that got me completely engaged in STEM to the extent that I would go and talk for hours about what they said!"

**Parent from Chadds Ford, PA**: "The program was excellent and initiated conversation with my 13 yr old about a career in STEM. The speakers were fantastic and I was so impressed with the message from each of them. Very inspiring. Wish I had this type of opportunity to hear from such esteemed experts when I was 13."

**Middle School Student from Laurel, MD**: "It was cool. I liked hearing more about fields I have considered working in in the future. The experience was interesting, and taught me more about what possible job opportunities for me may look and be like."

**Parent from Falls Church, VA**: "The activities piqued my 11 year olds interest in science. He is an artist and also great in sciences. But, art being a free form, he is more interested in art. After the talks by neurosurgeon and the NASA astronauts, he got a different perspective. Now he is very much excited about science careers too. Thanks to the X-STEM expo."

Parent from Riverview, FL: "My daughter absolutely loves STEM and was very excited to know she would be participating in the USA Science and Engineering Festival. It completely worked with her e-learning schedule, and we both found each session enlightening and enriching. Furthermore, as a parent, I appreciated the daily worksheets to answer questions based on each speaker's presentation. We took full advantage of this feature. Not only did it make a great difference in learning and retaining new information; but, it also produced more questions for my daughter to research. Awesome work to each of you for hosting such an awesome learning opportunity for ALL students. Exposure is key and we will definitely continue to participate in your initiatives. Many blessings!"

**Middle School Student from Chantilly, MD**: "The X-STEM All Access was really fun! Some super great speakers showed up, and it sure got me excited about STEM!"

**STEM Professional from Muncie, IN**: "Excellent way to get youth interested in STEM related activities and gives them an insight into the work of scientists in many fields."

Educator from Woodbridge, VA: "I had several students watch the X-STEM ALL Access experience live. I used the open-ended reflection questions and my students sent them to me via email. I really enjoyed the messages that the presenters provided about the importance of diversity in science and how science is included in all aspects of our lives. What was really enjoyable was to see the number of women who were featured as an African American science teacher of over 20 years I always enjoy seeing women scientists at the top of their profession. I also enjoyed the brain-breaks as they provided relief from sitting and were engaging. Job well done overall. Thank you for providing such an awesome service for teachers and students without cost."

**Parent from Montgomery, MD**: "The variety of speakers and STEM experiences reinforced the reality that STEM is all around us and accessible. Very impressive and impassioned speakers during these lockdown times they were even more relatable as they broadcast from their home to ours.... quite a positive and uplifting educational experience."

**Educator from Plymouth, MN**: "I thought it was really great, the pace was perfect and kept kids attention. The presenters spoke in terms that kids could understand and really relate to what they were saying. Of my students that watched they were all pleasantly surprised at how much they liked it --thinking it would be a boring lecture -- and said would watch it again next year if there was another one."

Parent from Onsted, MI: "We made these a part of our "Lunch and Learns." My two girls and I had so much fun learning and listening to all the admirable speakers....we made unforgettable memories dancing and singing to Underwater Caves with Roy Moye III!!"

**Parent from Silver Spring, MD**: "Wow, what a terrific resource during this time of stay-at-home social distance. Our kids wanted to be involved the entire time. The MC, Mr. Fascinate, was fantastic. Thanks for a star studded incredible learning experience for my children!"

**Parent from Stafford, VA**: "This was a very diverse, powerful series with dynamic speakers and amazing stories! Very well done. Looking forward to more Virtual events over the summer."

**Educator from Washington, DC**: "X-STEM was so inspiring, thank you for making this event virtual. Our cancelled field trip turned into a 5-day adventure, and in the end, students could see everyone!"

**Educator from Puerto Rico**: "It was really excellent. Thanks for the opportunity. My students were fascinated for having such a great experience. Almost all of them sent their assignments."

**Educator from Bronx, NY**: "It was so great to have all these special guests and speakers showing us their work. We need more of this for distance learning. The sessions were well-paced and the brain breaks were good."

**Parent from Salisbury, MD**: "I loved everything about the X-STEM!! The speakers narrated amazing personal stories that were relatable and resonated with us. Our 12-y old loved it a lot. The 1-h time slot in the middle of the day was a perfect segue for our son who is switching around between school work, music, etc."

Parent in Westminster, MD: "My son was COMPLETELY engaged - I could walk by him and he was completely oblivious to me, he was that thoroughly focused. (In fact I thought he was asleep and had to walk up to him and then I discovered he was wide awake but totally focused on the material. I was skeptical going into this that he wouldn't be interested in some of the speakers (no offense meant to them), but he loved them all. He liked the fact he was seeing such a variety of topics and speakers - he was introduced to topics he hadn't seen before."

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#### **SPEAKER QUOTES**

**Greg Gage**: "The X-STEM audiences are great. As a speaker, I can see the impact of the talk in the weeks to months that follow through emails and social media. I speak frequently at keynote events and find the X-STEM team one of the most professional and easiest to work with in the business."

**Jill Heinerth**: "X-STEM has always been a great show, but it was absolutely critical this year to reach into homes all over the world and offer home-schooled kids a chance to meet some mentors."

**Justin Shaifer:** "The opportunity to engage young people with STEM at an unprecedented scale was unforgettable. I received countless messages from parents, young people and educators about the profound impact of X-STEM All-Access. Surely, this event has sparked the imagination of future STEM leaders across the globe."

The X-STEM All Access series can be viewed on-demand here: <a href="https://usasciencefestival.org/x-stem-all-access/">https://usasciencefestival.org/x-stem-all-access/</a>

We thank you for your generous support of this program and look forward to working together again.

- The USA Science & Engineering Festival Team

