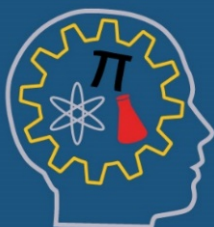


SEVENTH ANNUAL MARYLAND STEM FESTIVAL

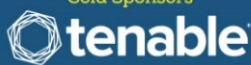


2021

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<https://www.gofundme.com/t/MDSTEMFest2019>



PODCASTS

<http://marylandstemfestival.libsyn.com/website>

The Maryland STEM Festival
is made possible thanks in part to:
American Council of Engineering Companies-Maryland



Festival Summary Report

2021 Maryland STEM Festival

What a year it was for Marylanders and STEM! The 2021 Maryland STEM Festival not only persevered but thrived as we battled COVID and the delta variant. Over three-hundred events were held in a variety of formats, including virtual, in-person and hybrid. Once again, The Festival was a success thanks to the extraordinary efforts of our hosts. We are so fortunate to have been able to continue doing this important work in our community.





Festival Summary Report

Health and Wellness

This year's theme was Health and Wellness. We had strong support and participation from the health care and biotech communities, including partners and organizations like AstraZeneca, Horizon Therapeutics, United Therapeutics, Johns Hopkins School of Medicine and Merck Animal Science. Several of our events allowed the opportunity to organically spotlight our partners and sponsors, examples include:

- [Opening Ceremony](#) featuring welcoming comments from Governor Hogan, Senator Van Hollen, Senator Cardin, and WBAL's Ava Marie, the event included speakers from the National Cancer Institute and Horizon Therapeutics!
- [Mental Health Research](#) featuring speakers from Johns Hopkins University and University of Maryland discussing the unique mental health challenges that arise during a pandemic.
- [Technology and Robotics in Health Care](#) spotlighted the important work being done right here in Maryland in the Engineering category.
- [Healthy Bodies](#): Somerset Public Libraries provided an opportunity to talk with UMEs exercise students about the ways exercise contributes to overall health and wellness.





Festival Summary Report

In-Person Events

Nearly half of the Festival's 300 events were in-person! Key examples of our successful return to in-person events include:

- [Robot Pumpkin Smash](#) - Robo-Lions, a team of students, fired up their robots for a smash hit: Robot Pumpkin Smash!
- [STEM Family Fun Fair](#) – Notre Dame of Maryland hosted a series of fun-filled drop-in events providing kids an opportunity to collaborate and solve engineering and design challenges.
- [STEAM Fest](#) – Hagerstown Community College hosted a collection of activities that included making music, chemical etching to make jewelry, catapults, an egg drop challenge, and the chemistry of ice cream!
- [Waverly Star Wars 4H Environmental Heath - Community Cleanup](#) - The Waverly 4-H STEAM Program and the Baltimore City 4-H Youth STEAM Ambassadors led other youth and adults in learning about environmental health and cleaned up their Waverly school community.





Festival Summary Report

Virtual Events

Despite the excitement to return to in-person events, the threat of Covid-19 remained very real, and as such, the festival also maintained a robust calendar of virtual events that would allow anyone to enjoy our programming from anywhere! We were thrilled to bring in [Steve Spangler](#) and [Maynard Okereke](#), the Hip Hop MD!

- Steve has been featured on Food Network, NBC Nightly News, Today Show, and Good Morning America.
- Maynard created the Spark of STEM Coffee Break for the USA Science and Engineering Festival.

Other exciting virtual events included:

- [Cybersecurity Career Panel Discussion](#) - Listen to a diverse group of Cybersecurity Professionals talk about what they really do.
- [Meet Dan Tani](#) - Astronaut Dan Tani discussed his career as an Astronaut and NASA's intricate, invisible world of space communications.
- [5th Blue Collar STEM Conference](#) - Discussion of high-paying STEM jobs that don't require the traditional four-year college path.
- [One Day Medical School at Johns Hopkins](#) - Provided a discussion of what a career as a physician is like.

We also continued to display all our virtual content for future use & reference at: <https://www.youtube.com/channel/UCq5nF02KmU64irzh2SBHjCA>





Festival Summary Report

In-School Events

The Festival's long-term growth and development relies on our ability to connect with students. One of the best ways to do that is to have our events featured at their school, as part of their regular class schedule & curriculum. This year, the Festival hosted virtual programs at four schools, with the hope of adding many more in subsequent years:

- Old Mill Middle School [_](#) Held virtual presentations from Ford and the Unmanned Safety Institute.
- Patterson High School [_](#) Held a virtual presentation from Astronaut Tom Jones.
- Thomas Johnson Middle School [_](#) Held virtual presentations from McCormick, the US Army and more.
- Garrison Forest School [_](#) Held a virtual presentation from Astronaut Mary Cleave.



"Thank you for coming on Zoom to teach us about your trip to space. I thought that it was very inspirational and interesting. You inspired me and many other girls!" – Brianna, Garrison Forest School

Next year, we plan to increase our in-school presence through a larger effort to bring STEM professionals into classrooms for speaking engagements, question/answer sessions and more! Details will be forthcoming as we continue to actively plan for our 2022 Festival!



Festival Summary Report

Underserved Communities

The Festival is passionate about bring STEM to underserved communities. One of our goals is to help build equitable access to science learning experiences for groups under-represented in STEM. Some for the events that highlighted this effort are

- [STEM-powerment for Middle School Girls](#) - A diverse group of Women STEM Professionals discussed how they succeeded in STEM.
- [Women Warriors](#) - Military Women in STEM fields discuss their career opportunities & the challenges THEY faced at the start of (and throughout) their careers.
- [Stem of Many Colors Conversation](#) - STEM Professionals from minority communities discussed what they do on a daily basis and the challenges they experienced in their career.
- [Bilingual Hispanic STEM Night](#) - Representatives from the Hispanic Community discussed careers in Engineering, Technology, Science and more. Program was held in both Spanish and English!





Festival Summary Report

Maryland STEM Festival Donations

The Festival discovered a new avenue to provide STEM opportunities by purchasing Science Kits from FutureMakers and Engineering Books from Start Engineering. The Festival donated these kits and books to schools in nearly every County and Baltimore City. A few great examples of these recipients include:

- Maryland School for the Blind
- Maryland School for the Deaf
- Tulip Grove Elementary School
- Baybrook Elementary and Middle School



"It was super cool. I never thought a little motor and just a few materials would make a big impact."- 5th Grade Student at John Humbird Elementary School, Allegany County Public School discussing the wiggiebot kit donated to his school.



Festival Summary Report

In 2021, the Festival proved its tenacity and place within the Maryland community. Looking forward to 2022, the Festival intends to return to a primarily in-person format. The past two years have taught us that anything is possible & our experiences have shown that our world is still changing rapidly. The technology & engineering developments that have come out of the pandemic have enabled a much more virtual-friendly world we now live in. As such, while we aspire to be primarily in-person, we have also proven that the Festival is capable of not only surviving in a virtual world, but also thriving in one! We stand ready to continue to create engaging and compelling events that will inspire the young minds of tomorrow, and we have gained the experience and confidence to do so in either an in-person or a virtual world. The 2022 Festival will take place from October 14th through November 13th. Check our website and social media as the details develop.



The Maryland STEM Festival is a 501 (c) (3) corporation that needs the public's support to survive. See website for sponsorship, donation and crowdsourcing opportunities.