MICHIGAN STATE UNIVERSITY
SCIENCE FESTIVAL
APRIL 5-20, 2019
UNRAVELING MYSTERIES
2019 RECAP
SCIENCEFESTIVAL.MSU.EDU
Every year, over the course of multiple days, the MSU Science Festival invites the public to experience more than 250 presentations and hands-on activities on the MSU campus and at venues across the state. There’s something for everyone at the Science Festival, with presentations geared for all ages and interests.

**OUR MISSION**

The mission of the MSU Science Festival is to celebrate the many ways science, technology, engineering, art, and mathematics (the STEAM disciplines) touch our everyday lives and shape our future.

**OUR GOALS**

- Provide a rare opportunity for people of all ages to experience STEAM live
- Create opportunities to discover new concepts through hands-on experiences and face-to-face interactions with scientists, artists, and other STEAM professionals
- Inspire future generations about STEAM fields and career opportunities
- Promote MSU as a champion of STEAM outreach and research across the state
- Provide a platform for faculty, staff, and students to develop and hone informal science communication skills
- Create networking opportunities with other scientific, cultural, and educational institutions
Unraveling the Mysteries, the theme of the 2019 Festival, inspired us to share new and creative experiences with attendees because life is full of mysteries that we'd like to solve. In that spirit, we tackled a tough topic that happened right here in Michigan, the Flint water crisis. Pediatrician Dr. Mona Hanna-Attisha kicked off the Festival as our special guest speaker with her talk “Unraveling the Mysteries of the Flint Water Crisis.”

There was something for everyone at the 7th annual MSU Science Festival. More than 350 scientists, educators, and community partners donated their time to dazzle, delight, and inspire visitors of all ages.

We are excited for 2020 and look forward to working with our community partners and sponsors to create and build another spectacular Festival inspiring wonder and curiosity.

Sincerely,

**MSU Science Festival Team**
Roxanne Truhn, *Coordinator*
Katherine Hagman, *Assistant Coordinator*
Julian Esaw, *Student Assistant*
Reanna Lotrey, *Student Assistant*
Abigail Martinez, *Student Assistant*
2019 FESTIVAL HIGHLIGHTS

GUEST SPEAKER
Pediatrician Dr. Mona Hanna-Attisha opened the Festival, presenting “Unraveling the Mysteries of the Flint Water Crisis.” She shared how she worked with fellow Flint residents and professional colleagues to “Unravel the Mysteries” of what happened to the Flint water supply and the public health disaster that resulted. 550 copies of Dr. Hanna-Attisha’s book were donated.

“Very pragmatic and inspirational • Loved the connection from Flint issues to global ones • Great vehicle to spread the word that science should be trusted

ATTENDEE COMMENTS FROM DR. HANNA-ATTISHA’S TALK

MSU EXPO DAY
MSU Expo Day continues to be one of the Festival’s most loved events, engaging visitors of all ages with booths of more than 100 hands-on activities and 42 talks, demonstrations, and performances. During the six Expo hours, attendees could program a robot arm, make paper from invasive plants, pet a bee, make their own pulsar, view the sun through a solar telescope, delight in large scale chemistry demonstrations, and more.

TOUR DAY
Tour Day continues to grow each year, with more than 50 MSU departments on campus and partners across the state opening their doors for one-of-a-kind tours. Offerings included everything from touring the National Superconducting Laboratory, to exploring ecology at a variety of locations, to learning about the science of sound.

NIGHTS AT THE MUSEUMS
The MSU Science Festival partnered with 11 museums around the state who opened their doors for free evenings of events such as behind-the-scene tours, and hands-on activities.

SCHOOL PROGRAMS
More than 2,000 K-12 students from 19 schools enjoyed presentations from STEAM professionals who shared their work, stories, and careers through on-campus and in-school programming.

STATEWIDE ASTRONOMY NIGHT
Michigan stargazers had the opportunity to look skyward and participate in free astronomy activities at 13 partner museums, planetariums, and observatories across the state.

SCIENCE CAFÉ/PUB NIGHTS
Scientists and community partners stepped outside of their laboratory or institution and into 11 cafes or pubs around the state to share their insights on topics such as plant propagation, comedy and the brain, and urban agriculture.

DETROIT EXPO DAY
Detroit Expo Day was held at Belle Isle Park, engaging attendees with hands-on activities, demonstrations, and talks on a range of topics from learning how sea lampreys are controlled, to the human brain on music, to launching rockets.

“The MSU Science Festival is a valuable partnership for us and allows us to show that Michigan history is relevant in all disciplines, not just social studies.”

SARA GROSS, MICHIGAN HISTORY CENTER
(MSU SCIENCE FESTIVAL PARTNER AND HOST MUSEUM)
2019 FESTIVAL HIGHLIGHTS

BY THE NUMBERS

100% of events are FREE

99.7% would recommend the festival to others*

100% of attendees rated the Festival good to excellent*

20,000+ visitors

2,000 K-12 students

80 MSU units

250 events and activities

70 community partners

38 statewide venues

* Based on 2019 attendee survey respondents

"This was our first time attending. We drove two hours and stayed in a hotel. Our two boys and us thoroughly enjoyed our first experience. We’ll be back! Thank you!

Love the variety of talks, tours, and everything!

Love that science and steam activities are accessible to kids, which will encourage their curiosity.

So many things to do for all ages! Great way to bring science into the community.

COMMENTS FROM ATTENDEES"
COMMUNITY IMPACT

88% of attendees learned something new*
83% became more aware of how STEAM fields will affect our future*
71% became more aware of jobs related to STEAM*
83% became more aware of STEAM in their everyday lives*
59% were new to the Festival*

* Based on 2019 attendee survey respondents

COMMUNITY PARTNERSHIPS

Festival partners increased their public visibility through the Festival’s robust marketing programs—the website, web ads, social media campaigns, television, radio, newspapers, and other targeted marketing. We worked with our media sponsors—WILX Channel 10, WKAR, Lansing State Journal, and City Pulse—to promote our campus and our statewide events. Our Festival team also distributed posters, flyers, and program booklets throughout the community. All of this resulted in attracting over 20,000 attendees to the 2019 Festival.

- 2.5 million media impressions**
- 40,439 Festival website users**
- 52,798 website sessions**

**Based on data from our marketing partners and website analytics

I really had fun and gained partnerships, we look forward to bigger and better science festival next year.
You all do a fantastic job, and working with you every year is always a joy!
Great effort that rewards the community very much!

COMMENTS FROM PRESENTERS
**MSU Partnering Units**

Abrams Planetarium  
BEACON Center for the Study of Evolution in Action  
Biomedical Laboratory Diagnostics Program  
Center for Advanced Microscopy  
College of Agriculture and Natural Resources  
College of Communication Arts and Sciences  
College of Nursing  
College of Osteopathic Medicine  
College of Veterinary Medicine  
Community Music School  
Community Music School-Detroit  
CREATE for STEM Institute  
Department of Advertising and Public Relations  
Department of Animal Science  
Department of Anthropology  
Department of Biochemistry and Molecular Biology  
Department of Biomedical Engineering  
Department of Chemical Engineering  
Department of Chemistry  
Department of Civil and Environmental Engineering  
Department of Computational Mathematics, Science and Engineering  
Department of Earth and Environmental Sciences  
Department of Electrical and Computer Engineering  
Department of Entomology  
Department of Fisheries and Wildlife  
Department of Forestry  
Department of Horticulture  
Department of Human Development and Family Studies  
Department of Integrative Biology  
Department of Kinesiology  
Department of Large Animal Clinical Sciences  
Department of Mechanical Engineering  
Department of Media and Information  
Department of Microbiology and Molecular Genetics  
Department of Pharmacology and Toxicology  
Department of Physics and Astronomy  
Department of Physiology  
Department of Plant Biology  
Department of Plant, Soil & Microbial Sciences  
Department of Psychology  
Department of Radiology  
Department of Theatre  
Facility for Rare Isotope Beams  
Graduate Women in STEM  
Hub for Innovation in Learning and Technology  
Human Biology Program  
Infrastructure, Planning and Facilities  
Julian Samora Research Institute  
Planning, Design and Construction  
Michigan 4-H Children’s Gardens  
Michigan Natural Features Inventory  
MSU Broad Art Museum  
MSU Extension  
MSU Extension Greening Michigan Institute  
MSU Libraries  
MSU Museum  
National Superconducting Cyclotron Laboratory  
Neuroscience Program  
Plant Research Lab Open Source Ecology  
School of Planning, Design and Construction  
Spartan Dischords  
The Writing Center  
Translational Science and Molecular Medicine  
University Archives and Historical Collections  
WKAR  
W.J. Beal Botanical Garden  
W.K. Kellogg Bird Sanctuary  
W.K. Kellogg Manor House  

**Community Partner Presenters**

AccelerateKID  
Air Zoo*  
American Fifth Distillery*  
Ann Arbor Hands-On Museum*  
Atwater Brewery*  
Belle Isle Conservancy*  
Capital Area District Libraries  
Cooperative Institute for Great Lakes Research-CIGLR  
PAPCEP  
Delta College Planetarium*  
Delta Dental  
Detroit Hives  
Detroit Public Library*  
Detroit Salt Company  
East Arbor Architecture  
Eastern Michigan University, Physics and Astronomy*  
Ella Sharp Museum*  
Everyday Science for Kids  
Fenner Nature Center  
Fox Park Observatory*  
Fungi Freights & Environmental Studio, LLC  
Grand Rapids Amateur Astronomical Association  
Grand Rapids Public Museum, Planetarium*  
Great Lakes Fishery Commission  
Harris Nature Center*  
Impression 5 Science Center*  
ITEC Lansing  
K12  
Kalamazoo Valley Museum*  
Kingman Museum*  
Lansing Community College, Youth Program  
Lansing Makers Network  
Lawrence Tech University  
Leslie Science and Nature Center*  
Marquette Senior High School*  
MI STEM Network  
Michigan Audubon  
Michigan Department of Environmental Quality  
Michigan History Center*  
Michigan Science Center*  
Mid-Michigan Cooperative Invasive Species Management Area  
Montessori Radmoor School  
MSU Federal Credit Union  
Nature Discovery  
NOAA*  
nTH Degree Symmetry  
Odd Side Ales  
Potter Park Zoo*  
REACH Studio Art Center  
STEM for All  
STEM on STAGE  
Steppingstone School  
The Paper Airplane Press  
Third Man Pressing*  
Thunder Bay National Marine Sanctuary*  
Tri-County Regional Planning Commission  
Tuskegee Airmen National Historical Museum  
University of Michigan – Dearborn, College of Engineering & Computer Science  
University of Michigan – Dearborn, Mechanical Engineering  
University of Michigan SEAS  
University of Pennsylvania, Genetics  
Victory Martial Arts  
Wayne State University, Physics & Astronomy*  
WDIV-TV*  
Western Michigan University, Pre-College Programs  
WILX*  
Woldumar Nature Center*  
Yankee Air Museum*  

*MSU Science Festival host sites
Thank you to all of our generous sponsors who helped make the MSU Science Festival possible.