

NSTA NATIONAL CONFERENCE ON SCIENCE EDUCATION

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**SCIENCE**

EXPANDING THE VISION

**BOSTON**

**April 2–5, 2020**

CONFERENCE PREVIEW

#NSTA20



**nsta**  
National Science Teaching Association



## *Building partnerships for stronger communities*

*The Northrop Grumman Foundation is proud to partner with teachers as they excite students about STEM and inspire the next generation of innovators and problem solvers.*

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## Boston Conference Committee Leaders

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# SPEAKERS



Follow your favorite speaker on Twitter! See our featured speakers' Twitter handles on these pages or search on #NSTA20.

## THE KAVLI FOUNDATION KEYNOTE



### The Rise and Fall and Rise Again of Pluto

Date/Time: **Thursday, April 2, 9:15–10:30 AM**

#### Jane Luu

Principal Member of the Technical Staff, Draper Laboratory, Cambridge, MA; and Adjunct Professor, Dept. of Geosciences and Institute of Theoretical Astrophysics, University of Oslo, Norway

*NSTA wishes to thank The Kavli Foundation for sponsoring this speaker.*



#### FEATURED PRESENTATION

### We Love to Hate Assessments; Let's Do Something About It

Date/Time: **Friday, April 3, 3:30–4:30 PM**

Strand: **Aligning the Lenses: Authentic, Three-Dimensional Measurement of Student Learning**

#### Aneesha Badrinarayan /// @abadri09

Director, Special Projects and Initiatives, Achieve, Inc., Washington, DC



We at NSTA are elated, and we think you will be, too.

Debuting at the NSTA National Conference on Science Education in Boston, we are thrilled to announce the "Science Educators' Best of Show" program. For the first time, you can vote on your favorite technology, lab equipment, and STEM

product and services; and you can vote for that superstar, outstanding vendor who goes above-and-beyond for you with extraordinary customer service: The Outstanding Vendor, Attendee's Choice Award.

Why? Because teachers trust teachers. This is your opportunity to tell your educator colleagues what's "the best of the best" at the NSTA National Conference in Boston. It's simple. Just vote via the NSTA conference app.

Let's add a little more fun—prizes. More details will be revealed as we get closer to the conference.

Do we hear cheers already?

## Building K–12 Data Fluency Within Three-Dimensional Learning

Special Panel • Friday, April 3, 9:30–10:30 AM

We live in a world awash in data at every turn, yet experiences with data for K–12 learners can be few and far between. What does it mean for us to prepare today's learners for a future defined by data? What competencies and understandings are necessary in navigating the world of big data as a citizen and worker? How can three-dimensional learning experiences introduce and engage learners with data in meaningful ways? This experienced group of panelists will debate these and other important ideas in a lively conversation that draws upon current research on learning and the current realities of the workplace and world at large. Panelists include Jan Mokros, Longstanding Expert in Data; Lin Chambers, Physical Scientist / EPO Lead at NASA Langley Research Center; Karon Weber, Microsoft Education Workshop Senior Director; Tom Baker, Education Manager at ESRI; and Chad Dorsey, President and CEO, The Concord Consortium.



### FEATURED PRESENTATION

## The Light at the End of the Tunnel: Phenomena and Models to Guide Us

Date/Time: **Thursday, April 2, 3:30–4:30 PM**

Strand: **The Long View: Building a Lifelong Passion for Science**

### Arthur Eisenkraft

2000–2001 NSTA President, and Distinguished Professor of Science Education, Professor of Physics, and Director, Center of Science and Math in Context (COSMIC), University of Massachusetts Boston



### FEATURED PRESENTATION

## STEM #IRL: Hurling Science Home and into the Future

Date/Time: **Saturday, April 4, 9:30–10:30 AM**

Strand: **Learning Science in All Spaces and Places: Near and Far**

### Lindsey Murphy /// @AuntLindsey

Creator and Host of The Fab Lab with Crazy Aunt Lindsey, Portland, OR



### FEATURED PRESENTATION

## Science Is to STEM as Coffee Is to Starbucks: Real World, Relevant, and Grounds for the Perfect Integration

Date/Time: **Saturday, April 4, 11:00 AM–12 Noon**

Strand: **Thinking, Acting, and Communicating Like Scientists: A Focus on Disciplinary Literacy**

### Elizabeth Birr Moje /// @UMichEducation

Dean, George Herbert Mead Collegiate Professor of Education, and Arthur F. Thurnau Professor, University of Michigan School of Education, Ann Arbor


**MARY C. McCURDY LECTURE**
**The Crosscutting Concepts—Science, Children’s Literature, and Beyond**

Date/Time: **Thursday, April 2, 2:00–3:00 PM**

**Valerie Bang-Jensen** /// @vbangjensen

Professor and Chair, Education Dept., Saint Michael’s College, Colchester, VT


**Mark Lubkowitz**

Professor and Chair, Biology Dept., Saint Michael’s College, Colchester, VT

*Speaker photos courtesy of ©Heinemann 2017, Photographer Michael Grover*


**NOAA/NESTA LECTURE**
**Sea Level Rise Here and Now**

Date/Time: **Friday, April 3, 2:00–3:00 PM**

**William Sweet**

Oceanographer, National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), and Center for Operational Oceanographic Products and Services (COOPS), Silver Spring, MD


**NSTA/ASE HONORS EXCHANGE LECTURE**
**LifeLab Southampton: Is Health Literacy Teachable in Adolescence?**

Date/Time: **Saturday, April 4, 2:00–3:00 PM**

**Janice Griffiths** /// @Janice\_G

Director of Enterprise, Southampton Education School, University of Southampton, U.K.



PAUL F-BRANDWEIN LECTURE

## Walden Warming: Climate Change Comes to Thoreau's Concord

Date/Time: **Saturday, April 4, 12:30–1:30 PM**

**Richard Primack**

Professor of Biology, Boston University, Boston, MA



**E.O. Wilson** /// @EOWilsonFndtn

2020 Recipient of the Brandwein Medal, and an American Biologist, Theorist, Naturalist, and Author

*NSTA wishes to thank Brandwein Institute for sponsoring this talk.*

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## The Best Place to Explore Three-Dimensional Teaching and Learning

**NGSS@NSTA Forum**

**Friday, April 3 • 162AB, Boston Convention & Exhibition Center**

This year's NGSS@NSTA Forum focuses on the role of curriculum materials in improving three-dimensional learning. There are sessions featuring units addressing an array of disciplines and grade levels as well as the role of professional learning and assessment in using curriculum materials. Visit [www.nsta.org/bostonbrowser](http://www.nsta.org/bostonbrowser) for a list of the sessions.

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**NGSS@NSTA Share-a-Thon**

**Saturday, April 4 • 9:30–11:00 AM**

**162AB, Boston Convention & Exhibition Center**

At the NGSS@NSTA Share-a-Thon, get tips and tools to implement three-dimensional performance expectations from NSTA's NGSS Curators, NGSS writers, and other education experts. Leave with plenty of handouts and ideas you can use in your classroom right away!

**NGSS@NSTA**  
STEM STARTS HERE



# PROFESSIONAL LEARNING INSTITUTES

Professional Learning Institutes (PLIs) are focused, content-based programs that explore key topics in science and STEM education in depth. PLIs are presented by experts in science and STEM education, professional learning, standards implementation, assessment, curriculum, and resources development. For complete descriptions, a list of presenters, and to purchase tickets, visit [www.nsta.org/conferences/PLI](http://www.nsta.org/conferences/PLI). (Tickets Required)

## The Next Generation of Language Learning in Science: Engaging Multiple Language Learners in the Science Classroom (PLI-1)

Date/Time: **Wednesday, April 1, 9:00 AM–4:00 PM**

Ticket Price: **\$125, with conference registration**

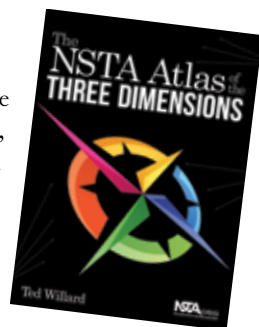
*A Framework for K–12 Science Education* advocates a three-dimensional approach to teaching science that integrates disciplinary core ideas, crosscutting concepts, and science and engineering practices. But we need to leverage a fourth dimension—discourse—to effectively engage our nation’s fastest-growing group of students: English language learners and multilingual learners (MLLs). Presenters will offer approaches, applicable for grades K–20, for engaging MLLs with their peers in the exciting and complex reasoning and discourse of science.

## The NSTA Atlas of the Three Dimensions (PLI-2)

Date/Time: **Wednesday, April 1, 9:00 AM–4:00 PM**

Ticket Price: **\$180, with conference registration**

*The NSTA Atlas of the Three Dimensions* maps the elements of the core ideas, practices, crosscutting concepts, connections to nature of science, connections to engineering, and performance expectations described in the *Next Generation Science Standards (NGSS)* and other standards based on *A Framework for K–12 Science Education*. Applying the same techniques used to develop AAAS Project 2061’s *Atlas of Science Literacy*, the 62 maps in this new *Atlas* show how the elements of the dimensions relate to and build on one another. All attendees receive a copy of the *Atlas*.



## Teaching with and Developing NGSS Storylines (PLI-3)

Date/Time: **Wednesday, April 1, 9:00 AM–4:00 PM**

Ticket Price: **\$125, with conference registration**

This full-day institute prepares participants to use tools developed by the NextGen Science Storylines project to teach with, adapt, or design *NGSS* storylines that are coherent from the student’s perspective. In a coherent storyline, students help plan and manage investigations rather than simply follow instructions. Storylines support students in developing ideas over time, motivated by questions about real-world phenomena and problems, where each step is an attempt to address a question or gap in the classroom’s current explanations or design solutions. These tools have been used to design four middle school and high school units (from NextGen Storylines and OpenSciEd) that have been awarded Achieve’s *NGSS* Design Badge.



## Using Technology to Conduct Investigations and Model Scientific Phenomena (PLI-4)

Date/Time: **Wednesday, April 1, 9:00 AM–4:00 PM**

Ticket Price: **\$125, with conference registration**

Using technology in three-dimensional learning experiences can be truly transformative, empowering learners to discover the world for themselves. The Concord Consortium experts guide participants through a series of interactive investigations using technologies ranging from probes and sensors, to data exploration tools, to flexible tools for modeling and simulation. Participants gain experience with free tools they can use for their own teaching and develop a research-based understanding of the importance of investigation and modeling that can make all their science lessons more engaging and effective.

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## Teaching *A Medical Mystery*: A Digital Middle School Science Unit for the NGSS (PLI-5)

Date/Time: **Saturday, April 4, 8:00 AM–12 Noon**

Ticket Price: **\$50, with conference registration**

Do you need a middle school curriculum that is designed to address the NGSS? In this half-day institute, presenters introduce a 10-week online curriculum that is free and has received a high rating from the EQUIP Peer Review Panel. As students complete the unit, they answer the question, How can a problem in one body system cause symptoms in other body systems? Come explore the unit and learn about the real-world phenomenon that anchors the learning, as well as the supports for teachers and students.

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## Developing Data Fluency Through Citizen Science and Real Data (PLI-6)

Date/Time: **Saturday, April 4, 1:00–5:00 PM**

Ticket Price: **\$50, with conference registration**

Citizen science offers a supportive framework to engage in science investigations that are grounded in real-world observation, contributing to and building on locally relevant questions, and to work with real-world data to draw evidence-based conclusions. Through these learning experiences, students build science practices, data fluency, and critical-thinking skills in an authentic and engaging way. This PLI engages participants in models of data learning taken from multiple citizen science contexts and leveraging multiple technology tools that support work with large and complex datasets.

# NETWORKING EVENT

Join your colleagues at this networking event. To purchase tickets, visit [www.nsta.org/bostonbrowser](http://www.nsta.org/bostonbrowser). (Tickets Required)

## NSTA Teacher Awards Gala (M-1)

Date: **Friday, April 3, 6:00–8:30 PM**

Registration Fee: **\$78 advance; \$83 on-site**

Come enjoy a fabulous evening celebrating with this year's teacher award recipients! ALL of the teacher awards will be presented in one grand evening. Join your colleagues in recognition of this year's winners. Evening attire is requested to honor our teacher award recipients. A limited number of tickets are available for this social event.



—Photo courtesy of Mike Weiss

## Elementary Extravaganza

**Friday, April 3, 2020 - 8:00–10:00 AM**  
Ballroom West, Boston Convention & Exhibition Center

- Hands-on activities
- Preview science trade books
- Learn about award and grant programs
- Walk away full of ideas and arms filled with materials
- Door prizes and refreshments
- 100+ presenters

JOIN THE FUN

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Organizations participating in the Elementary Extravaganza include the Association of Presidential Awardees in Science Teaching, the Council for Elementary Science International, the NSTA Committee on Preschool–Elementary Science Teaching, *Science & Children* authors and reviewers, and the Society of Elementary Presidential Awardees.



# NSTA School Partner Program



## Each Partner School receives these benefits:

- ✓ **NSTA membership** for all teachers in the school building
- ✓ **One free conference registration** for a teacher/administrator to a STEM Forum or an NSTA Conference
- ✓ **Recognition** as an NSTA Partner School
- ✓ **One print journal** for the school building and e-journals for every teacher/member in the school
- ✓ **One hard copy of NSTA Reports** (newspaper) with e-Reports for every teacher/member in the school
- ✓ **Access to Learning Center Forums**, including collections of NGSS and STEM resources differentiated by grades
- ✓ **An initial one-on-one conversation** with NSTA to determine which products and services can best support school-wide professional learning goals
- ✓ **Participation in three virtual conferences** per year, exploring critical topics for STEM and NGSS integration
- ✓ **Access** to a national NGSS and STEM listserv and 16 other listservs

## In addition, each teacher gets discounts on



**NSTA conferences and workshops**



**NSTA Press books**



**Enhanced e-books**

For more information please visit  
[www.nsta.org/schoolmembership](http://www.nsta.org/schoolmembership)

Contact us:  
[schoolmembership@nsta.org](mailto:schoolmembership@nsta.org)

# EDUCATIONAL TRIPS

Discover what Boston has to offer on one of our ticketed educational trips. For complete descriptions (including departure locations) and to purchase tickets, visit [www.nsta.org/bostonbrowser](http://www.nsta.org/bostonbrowser). (Tickets Required)

## Teaching Science Outdoors (T-1)

**Date:** Thursday, April 2, 9:00 AM–4:30 PM

**Ticket Price:** \$69 advance; \$74 on-site

Join us for this exploration of teaching science outdoors. Led by the Friends of the Boston Schoolyards and the Boston Public Schools (BPS) Science Department, participants will travel by bus to three special sites: the Arnold Arboretum, the Boston Nature Center, and a BPS outdoor classroom, where they will learn how to connect children with nature through authentic and meaningful outdoor science explorations. Participants will meet with a BPS science teacher in her outdoor classroom to learn how she brings students outside to learn. Lunch provided. *Note:* Wear clothing and shoes appropriate for walking outside, rain or shine.



—Courtesy of The Arnold Arboretum of Harvard University

## Behind the Scenes at the Harvard Museum of Natural History (T-2)

**Date:** Thursday, April 2, 12:45–4:45 PM

**Ticket Price:** \$30 advance; \$35 on-site

Join us for a behind-the-scenes tour of Harvard's amazing zoological collections, comprising more than 21 million specimens not accessible to the public. Following the tour, you will have time to visit the HMNH public museum, as well as the adjoining Peabody Museum of Archaeology and Ethnology, and the nearby Semitic Museum. *Note:* Children and spouses may visit the public museum after paying the entry fee but they cannot participate in the collections tour.

## Freedom Trail 90-Minute Tour: Walk Into History® (T-3)

**Date:** Thursday, April 2, 1:00–4:15 PM

**Ticket Price:** \$20 advance; \$25 on-site

Follow the footsteps of America's Founding Fathers on the Freedom Trail! Led by 18th-century costumed guides, this 90-minute walking tour is the Freedom Trail Foundation's most popular, introductory tour. *Note:* Dress for the weather and wear comfortable walking shoes. Group will take public transit.



—Photo courtesy of Freedom Trail Foundation





—Photo courtesy of New England Aquarium

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## Explore the Christa McAuliffe Center for Integrated Science Learning (T-4)

**Date: Thursday, April 2, 1:00–6:00 PM**

**Ticket Price: : \$45 advance; \$50 on-site**

Join us for an exploration of Earth's climate at the Framingham State University Planetarium. Watch the full-dome film, *Dynamic Earth* exploring the inner workings of Earth's great life support system: the global climate. After the film, educators will demonstrate how we use planetarium visualization software to display real data from NASA's constellation of Earth Observing System satellites. Travel time is an hour each way.

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## Freedom Trail Pub Tour (T-5)

**Date: Thursday, April 2, 5:00–8:15 PM**

**Ticket Price: \$52 advance; \$57 on-site**

Join a Freedom Trail Player®—18th-century costumed guide—on a Historic Pub Crawl and visit the real headquarters where the American Revolution was brewed—Blackstone Block. *Note:* Must be of legal drinking age: 21 or older; no substitutions. This 90-minute tour includes four pints of beer. Group will take public transit.

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## Geology and Habitats of Thompson Island: Walking Tour of a Boston Harbor Island (F-1)

**Date: Friday, April 3, 7:20 AM–5:15 PM**

**Ticket Price: \$25 advance; \$30 on-site**

Join us for a walking tour of Thompson Island in Boston Harbor. After a 25-minute ferry ride, we will investigate the bedrock geology of Boston from the harbor perspective. We will focus on the perspective of grades 3–8 students, but all levels of teachers are welcome. *Note:* Dress appropriately for a 5-mile hike in spring weather, including sturdy footwear. A picnic box lunch is included. Group will walk a half mile to and from the Convention Center and the marina/pier.



—Photo courtesy of Woods Hole Oceanographic Institution

## Teaching About Oceans and Coasts: An Insider’s Look at Research Institutions in the Woods Hole Area (F-2)

**Date:** Friday, April 3, 8:00 AM–5:30 PM

**Ticket Price:** \$66 advance; \$71 on-site

Explore ocean and coastal research at renowned Woods Hole area laboratories! At Waquoit Bay National Estuarine Research Reserve ([www.waquoitbayreserve.org](http://www.waquoitbayreserve.org)), we’ll learn about research and try out curricula on estuary systems and coastal impacts of climate change. Enjoy lunch on own at one of Woods Hole’s many restaurants. In the afternoon, we’ll get the insider’s tour of Woods Hole research institutions. *Note:* We’ll be outside for much of the time so dress in layers and wear walking shoes. Travel time will be 1.5 hours each way.

## Protecting the Blue Planet at the New England Aquarium (F-3)

**Date:** Friday, April 3, 8:30 AM–12:20 PM

**Ticket Price:** \$42 advance; \$47 on-site

Come join us at the New England Aquarium, where you will meet with one of our Anderson Cabot Center for Ocean Life staff to hear about innovative research. Afterward, our Education staff will share a case study on an educational opportunity with youth using this real-world data. Participants will receive free entrance into New England Aquarium where they can self-explore all of our exhibits, including the brand-new 9,000-gallon floor-to-ceiling Indo-Pacific Reef tank.

## Deer Island Tour and Interactive “Down-the-Drain” Presentation (F-4)

**Date:** Friday, April 3, 8:30 AM–12:30 PM

**Ticket Price:** \$32 advance; preregistration only

Take a tour of the facility to learn more about the history of the Island, in addition to the science and technology involved at one of the largest wastewater treatment plants in the country. The tour will begin in the restored 19th-century pumping station with an interactive “Down the Drain” presentation of the wastewater treatment process, followed by a tour of the plant. *Note:* Participants must present ID to enter facility and wear close-toed shoes. Photography is restricted to the exterior of the facilities. Travel time is one hour each way.

## Is It Spring Yet? (S-1)

**Date:** Saturday, April 4, 9:15 AM–12:45 PM

**Ticket Price:** \$45 advance; \$50 on-site

For the curious person, signs of spring in the Arnold Arboretum landscape abound. Venture outdoors with bug boxes, binoculars, pollen collectors, and thermometers; we will seek out the flora and fauna that herald the re-emergence of life. Wear warm clothes, a hat, and comfortable

walking shoes. *Note:* Participants should be able to participate in a 2-hour outdoor program that involves a mile walk on pavement.

## WGBH Studios Tour, Science Media Screening, and Panel Discussion (S-2)

Date: **Saturday, April 4, 1:00–5:00 PM**

Ticket Price: **\$30 advance; \$35 on-site**

WGBH is America's largest producer of PBS content on TV and online. Visit our studios to see where STEM productions like *NOVA*, *Design Squad*, *Peep and The Big Wide World*, and other shows are produced. Watch screenings in our theater of upcoming science media and resources WGBH is preparing for broadcast, as well as for publication on our education platform PBS LearningMedia. Trip includes a brief panel discussion on the work we're doing in STEM for diverse learners. Light refreshments and a bit of social time, optional studio tours, and complimentary gift bags included. *Note:* No filming allowed in the theater, however photos are permissible.

## Freedom Trail 3-Hour Tour: Walk Into History® (S-3)

Date: **Saturday, April 4, 12 Noon–5:15 PM**

Ticket Price: **\$26 advance; \$31 on-site**

Follow the footsteps of America's Founding Fathers on the Freedom Trail! Led by 18th-century costumed guides, you will visit all 16 official historic sites on this walking tour of Boston's iconic 2.75-mile Freedom Trail. For a complete description of all 16 sites, visit [www.thefreedomtrail.org/trail-sites](http://www.thefreedomtrail.org/trail-sites). *Note:* Dress for the weather and wear comfortable walking shoes, as well as bring water to drink. Group will take public transit.

PRE-K K 1 2 3 4 5 6 7 8 9 10 11 12 COLLEGE

# Meet Me in the Middle

Friday, April 3, 2020 | 10:00 AM - 4:30 PM

Boston Convention & Exhibition Center, Rooms 205-209

NSTA

\*Must be registered for the conference to attend\*

NMLSTA

Join us for a special **"Meet Me in the Middle Day,"** designed just for middle school educators, at **NSTA's 2020 National Conference in Boston!**

The day's events include workshops/presentations, two Roundtable Conversation networking sessions featuring a variety of topics, and an afternoon Share-a-thon with up to 100 presenters sharing their ideas.

All specifically designed for middle level educators.

You'll walk away with ideas you can use in your classroom next week!

Organized by the National Middle Level Science Teachers Association (NMLSTA)

Sponsored by



Attend for a chance to win a variety of incredible door prizes!

**#NSTA20**

[www.nsta.org/boston](http://www.nsta.org/boston)





# JOIN US

9TH ANNUAL

# STEM

SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS

## Forum & Expo

HOSTED BY NSTA

Louisville, Kentucky

July 22–24, 2020

- Experience hands-on sessions that enhance your ongoing development and improve your STEM knowledge.
- Explore ways to foster integration of research-based methods into the STEM curriculum.
- Network with colleagues and hone your STEM leadership skills.
- Compare project- and research-based activities that tackle issues of real-world relevance.
- Discover the aspirations of students who share their interests in STEM opportunities and careers.
- Check out the hottest tools and resources for STEM educators.
- Get the keys to success in developing partnerships with informal education groups, business, industry, and governmental agencies.

This dynamic event brings together educators and organizations that are actively implementing STEM programs in their schools or districts.

Come prepared to learn tactics that work, build your professional learning network, connect with effective outreach programs and partnerships, discover new resources, and build a strong curriculum.

#STEMforum



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National Science Teaching Association

# SAMPLE CONFERENCE SCHEDULE

Make your own conference schedule using the Boston Session Browser ([www.nsta.org/bostonbrowser](http://www.nsta.org/bostonbrowser)). Browse events by day, format, subject, grade level, conference strand, sponsor, or keyword.

		Life Science	Physical Science	Earth and Space Science	Engineering and Technology	General Science Education	Informal Science Education	PRESENTATION	WORKSHOP
Elementary	Thu., 8:00–9:00 AM—The Coral Project: Project-Based Learning			●				●	
	Thu., 12:30–1:30 PM—Two, Four, Six, Eight...This Is How We Integrate!					●			●
	Thu., 2:00–2:30 PM—An Early Childhood Summer Family Garden Club	●						●	
	Fri., 9:30–10:30 AM—Kinesthetic Astronomy in an Outdoor, 3-D Learning Setting			●					●
	Fri., 11:00 AM–12 Noon—Pollination Power: Engineering Hand Pollinators in an Engaging 5Es Experience	●							●
	Fri., 12:30–1:30 PM—Energize Your Grades 3–5 Classroom with eesmarts NGSS-Focused Lessons		●						●
	Sat., 8:00–8:30 AM—Make Mistakes, Learn, Redesign: Designing an Engineering Lab Space That Is Student Centered				●			●	
	Sat., 11:00 AM–12 Noon—Magnetics: The National Magnet Lab Shares All You Ever Wanted to Know About Magnets		●					●	
	Sat., 2:30–3:00 PM—Build Excitement for Science Through an Elementary STEM Club!						●	●	
Sun., 9:30–10:30 AM—Made for the Shade: A SUN-Sational Engineering Design Unit				●				●	
Middle Level	Thu., 8:00–8:30 AM—Shark Smart: A Middle School Perspective	●						●	
	Thu., 12:30–1:30 PM—Shifting Pedagogy and Passion in the STEM Classroom with HyperDocs						●		●
	Thu., 2:00–3:00 PM—Help! I'm Teaching Life Science to Middle Schoolers!	●							●
	Thu., 3:30–4:00 PM—Stations in the Middle					●		●	
	Fri., 8:00–9:00 AM—Investigating Life on the Third Rock			●					●
	Fri., 9:30–10:30 AM—What Does Computer Science in the Middle School Physical Science Classroom Look Like?		●						●
	Sat., 9:30–10:30 AM—Dialogic Practices to Explain Melting and Freezing Phenomena		●					●	
	Sat., 3:30–4:30 PM—The Sky Is Not the Limit				●			●	
	Sun., 9:30–10:30 AM—Drawdown: Reversing Global Warming!			●				●	
Sun., 11:00 AM–12 Noon—Optimize to Win: Exploring Speed and Velocity with Model Race Cars				●				●	
High School–College	Thu., 8:00–9:00 AM—Creating and Implementing NGSS Storyline Units to Increase Student Engagement	●						●	
	Thu., 12:30–1:30 PM—Engineering a New Option: Creating a NGSS-Based Engineering Design Elective				●			●	
	Thu., 2:00–3:00 PM—Biology Counts: The Use of Statistics in Biology	●							●
	Thu., 3:30–4:30 PM—Building Confidence in Chemistry Through Crosscutting Concepts		●					●	
	Fri., 8:00–8:30 AM—Student Choice Driving Science and Engineering Practices					●		●	
	Fri., 2:00–3:00 PM—Social Justice Chemistry Through Air Pollution		●						●
	Sat., 11:00 AM–12 Noon—Interdisciplinary, Phenomena-Based Lessons: Teaching and Adapting			●				●	
	Sat., 12:30–1:30 PM—Students Building, Evaluating, and Sharing Systems Models Using Multiple Free Tools and Scaffolded Case Studies				●				●
	Sat., 3:30–4:30 PM—Understanding Human Impacts and Phenomena Through Citizen Science						●		●
Sun., 9:30–10:30 AM—Using Earth Science as a Context for Chemistry Instruction: A Performance Assessment on Climate Change			●					●	

# SHORT COURSES

All short courses are filled on a first-come, first-served basis, so act now! For complete descriptions and to purchase tickets, visit [www.nsta.org/bostonbrowser](http://www.nsta.org/bostonbrowser). (Tickets Required)

## Building Understandings of Natural Phenomena: Hands-On Learning About Living Things and Their Relationships to Each Other and Their Environment (SC-1)

Date: **Thursday, April 2, 2:00–5:00 PM**

Ticket Price: **\$24 advance; \$29 on-site**

Strand: **Learning Science in All Spaces and Places: Near and Far**

For preservice and inservice early childhood / elementary educators—experience life science inquiry and build your knowledge of core ideas and concepts related to living things, using life science concepts in NGSS K-LS1-1 and 1-LS-1 From Molecules to Organisms: Structures and Processes. Use natural phenomena (rocks, plants, animals) and 5Es and other models to deepen student learning. Participate in NGSS three-dimensional hands-on activities involving multiple subject areas designed to support student thinking, learning, and reflecting about rocks/plants/animals and the relationships between them. Discuss the teacher’s role in using natural phenomenon to support children’s scientific thinking, conceptual development, and engagement in the practices of science, integrating STEM and literacy in context. For more information, visit [www.nsta.org/earlyyears](http://www.nsta.org/earlyyears) and [www.edc.org/cindy-hoisington](http://www.edc.org/cindy-hoisington).

## A Collection of Climate and Energy Educational Resources, Guiding Teachers Toward Climate and Energy Education (SC-2)

Date: **Thursday, April 2, 3:00–6:00 PM**

Ticket Price: **\$37 advance; \$42 on-site**

Multiple organizations devoted to climate literacy will share inquiry-based, peer-reviewed curriculum and instruction resources focused on Earth’s climate and global climate change. Participants will interact with educators from Climate Generation, National Center for Science Education, the Paleontological Research Institution (Cornell University), the Understanding Global Change Project (University of California, Berkeley), Young Voices for the Planet, American Meteorological Society, High School Students’ Climate Literacy through Epistemology of Scientific Modeling (CliMES) project at the University of Nebraska-Lincoln, the U.S. Ice Drilling Program, NOAA, Climate Literacy and Energy Awareness Network (CLEAN), and NSTA, itself. For more information, visit [www.cleanet.org](http://www.cleanet.org).

## “I Don’t Know What to Write!” Use Models and Activity Summary Boards to Give Students Something to Write About (SC-3)

Date: **Friday, April 3, 8:00–11:00 AM**

Ticket Price: **\$36 advance; \$41 on-site**

Strand: **Thinking, Acting, and Communicating Like Scientists: A Focus on Disciplinary Literacy**

Experience a lesson progression that builds knowledge to “figure out” phenomena while using science and engineering practices and crosscutting concepts to act, think, and communicate like scientists. Modeling supports the use of practices and crosscutting concepts through a progression of lessons and an activity summary board. The activity summary board serves as

a record of students' learning progression and develops a reference for constructing explanations; writing Claim, Evidence, and Reasoning; as well as engaging in argument from evidence. At the end of the workshop, participants will have experienced tools for the classroom that will engage students in three-dimensional learning.

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## Using the “How Do Eggs Become Chickens or Other Living Things?” Storyline to Support Students in Meaningful Engagement in Core Life Science Performance Expectations (SC-4)

Date: **Friday, April 3, 10:30 AM–5:00 PM**

Ticket Price: **\$40 advance; \$45 on-site**

Strand: **Aligning the Lenses: Authentic, Three-Dimensional Measurement of Student Learning**

Participants explore “How do eggs become chickens or other living things?”—a coherent *NGSS* storyline in which student questions lead to planning and carrying out investigations rather than simply following instructions. Immersed as students, participants experience the unit anchor where they develop their own Driving Question Board, identify related phenomena, and propose possible investigations to the lessons and unit performance expectations (MS LSI-1, MS LSI-2, MS LSI-3, and MS LS4-3). Finally, participants will examine authentic artifacts of summative three-dimensional assessments to map to the unit performance expectations and Driving Question Board. Bring your laptop/tablet. Plan for a 30-minute break for lunch on own.

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## NSTA Press Short Course: *Understanding Climate Change* (SC-5)

Date: **Friday, April 3, 2:00–5:00 PM**

Ticket Price: **\$34 advance; \$39 on-site**

Strand: **Thinking, Acting, and Communicating Like Scientists: A Focus on Disciplinary Literacy**

Engage students in this “hot topic” as they investigate evidence of climate change, present their findings, and create solutions—with three-dimensional learning woven throughout. Short course includes scaffolding for students to research climate change and then present their findings to classmates in much the same way that scientists do. We will share a system to evaluate both the ripple effects of a warming climate and the actions that can be taken to mitigate climate change. The curriculum is designed to be easy to use even if teachers have no background in climate science or are new to *NGSS*. Examples of student work will be shared to provide an in-depth look at the knowledge gained in these lessons. Presenters' PowerPoint and handouts will be provided. Note-taking encouraged.

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## An Introduction to Using Free, Online CODAP Data Software in Grades 6-14 STEM Classrooms (SC-6)

Date: **Saturday, April 4, 8:00–11:00 AM**

Ticket Price: **\$37 advance; \$42 on-site**

Strand: **The Long View: Building a Lifelong Passion for Science**

We'll dive into datasets useful at multiple grade levels, learn ways to use CODAP ([codap.concord.org](http://codap.concord.org)), and think about data practices. Participants will work with three or more datasets spanning multiple disciplines using the NSF-funded Common Online Data Analysis Platform (CODAP), which is free, online, open source, and classroom friendly. Working in pairs, participants will explore data, generate conjectures, share visualizations for whole group discussion, learn about “data moves,” and become sufficiently proficient with CODAP to begin using it with students. Bring laptops (not tablets)!



Short Course SC-7: NESTA and CIRES: On Board with MOSAiC:  
Unprecedented Science and Curriculum from a Year in the Arctic

## NESTA and CIRES: On Board with MOSAiC: Unprecedented Science and Curriculum from a Year in the Arctic (SC-7)

Date: **Saturday, April 4, 8:00–11:00 AM**

Ticket Price: **\$34 advance; \$39 on-site**

Strand: **Learning Science in All Spaces and Places: Near and Far**

MOSAiC stands for the Multidisciplinary drifting Observatory for the Study of Arctic Climate. In this short course, embark on an expedition with MOSAiC! Explore the Arctic of the past and present through a nature of science unit. In order to plan an Arctic expedition, students will compare and contrast past (wooden sailing ship *Fram*) and present (MOSAiC) expeditions to learn how methods, technologies, and our knowledge of the Arctic has changed over the past century. Students will hop aboard Arctic vessels in VR Google Expeditions, use engineering practices to design a ship that can withstand the pressure of the ice, and examine satellite imagery to predict their route. In addition to the nature of science unit, participants will learn about MOSAiC research related to the unique ecology of sea ice-driven ecosystems from a MOSAiC scientist. Bring a smartphone/laptop, as well as Google Cardboard if you own one. For more information, visit [mosaic.colorado.edu/education](http://mosaic.colorado.edu/education).

## Assessing What Matters: Designing Equitable 3-D Performance Assessments to Support All Learners (SC-8)

Date: **Saturday, April 4, 10:00 AM–4:00 PM**

Ticket Price: **\$47 advance; \$52 on-site**

Strand: **Aligning the Lenses: Authentic, Three-Dimensional Measurement of Student Learning**

Explore the key features of equitable three-dimensional assessments, designing assessments that value and advantage the assets students bring to the table. Walk away with a deeper understanding of the NGSS, knowledge of what 3-D assessments “look like” and how to design them, and models of how to design and modify current assessments to better support diverse learners. Bring your laptop. Plan for a half-hour break for lunch on own. For more information, visit [snapse.stanford.edu](http://snapse.stanford.edu).

## Equity and STEM (SC-9)

Date: **Saturday, April 4, 10:30 AM–4:00 PM**

Ticket Price: **\$22 advance; \$27 on-site**

What hinders STEM access for ALL students? Learn and experience proven strategies that can enhance educators’ own cultural competency, diversity awareness, and perspectives on racism and prejudice. We will employ two structures (dyads and support groups) for our participants to experience them, discuss how they might be used with students or colleagues, resulting in developing an Equity Action Plan with short- and long-range goals, outcomes, and activities to implement when they return to their respective workplaces. Teams of two or more from a school, district, or region are recommended but not required. Plan for a half-hour break for lunch on own.

# High School Share-a-Thon

## Set Yourselves Higher!

April 4, 2020, 9:30 – 11:00 AM

Boston Convention & Exhibition Center, Room 253AB

### Looking for new lessons for your classroom?

Join your fellow high school science educators to:

- Network with other secondary science teachers and share ideas.
- Hear about different activities in an informal manner; talk with the presenters one on one.
- Walk away with ideas to use tomorrow.
- Learn about award and grant programs.
- Enter to win doorprizes!



### Interested in being a presenter?

Contact Brenda Jones (NSTA High School Division Director) at [Brenda\\_Walsh@edenrk12.mn.us](mailto:Brenda_Walsh@edenrk12.mn.us).



## Linking Literacy

**SATURDAY, APRIL 4, 2020**

Join science teachers from across the globe for a special event focusing on science and children's literature! All are invited; however the event is especially geared for elementary teachers looking for strategies to increase science instruction while meeting ELA standards as well.

Highlights of the event will be:

- Hearing directly from great authors of trade books as they celebrate their work, discuss their books, and suggest how to use them in your classroom.
- Engaging in small group "Conversations with Authors" about how their books can help bring forth equity, promote three-dimensional science, and offer phenomena to engage readers, and make cross-curricular connections.



COME JOIN US FOR A CONFERENCE FEATURE THAT IS SURE TO BE A HIT AS WE LINK LITERACY WITH SCIENCE.

Saturday, April 4, 2020  
9:00 AM–3:00 PM

Linking Literacy Share-a-Thon  
Author Book Signing

Boston Convention & Exhibition Center  
Room 260





# EXHIBITORS

The NSTA Exhibit Hall, with more than 350 of the leading science education companies and organizations in the world, has the newest products to show and share with educators.

[www.nsta.org/bostonexhibits](http://www.nsta.org/bostonexhibits)

## EXHIBIT HOURS

THU., APRIL 2 11:00 AM–6:00 PM\*

FRI., APRIL 3 9:00 AM–5:00 PM

SAT., APRIL 4 9:00 AM–3:00 PM

## EXHIBIT LOCATION

The exhibits are located in Hall A of Boston Convention & Exhibition Center.

## FLOOR PLAN

Preview and create your own list of Boston exhibitors before the conference using the link above.

\*Exclusive Exhibit Hall and Exhibitor Workshop Hours • Thu., 11:00 AM–12:30 PM

### THIS IS A PARTIAL LIST OF EXHIBITORS.

3B Scientific	Bio-Rad Laboratories	Diversified Woodcrafts, Inc.
3D Molecular Designs	BIOZONE International Ltd.	Dynalox Labware
3Dux/design	Bone Clones, Inc.	Earth Force
9th Annual STEM Forum & Expo, Louisville, KY	Booksource	Earth Overshoot
AALAS Foundation	Bozemanscience.com, Inc.	Earthwatch Institute
Accelerate Learning, Inc.	BrainPOP	Ed Tech Authority
ACIS Educational Tours	Brown Dog Gadgets	Educational Innovations, Inc.
Activate Learning	Capitol Region Education Council	Edvotek Inc.
Adam Equipment, Inc	Capstone	EF Explore America
Aidmics Biotechnology	Carolina Biological Supply Co.	EiE   Museum of Science, Boston
Aldon Corporation	Catalyst Learning Curricula	Eisco Scientific
Algae Academy	Celestron	EnergyTeachers.org Inc.
American College of Education	Center for Translational Science Education, Tufts University School of Medicine	Environmental Systems Research Institute (Esri)
American Farm Bureau Foundation for Agriculture	Centripetal Press	Estes Industries
American Lab Design	The Ceramic and Glass Industry Foundation	ExploreLearning
American Meteorological Society	Charlesbridge	Explorica
American Museum of Natural History	Chemglass Life Sciences	FDA Food Science vtrition Education c/o Graduate School USA
American Society of Plant Biologists	CIEE: The Council on International Educational Exchange	Firefly Books
Amplify	Circuit Breaker Labs	FIRST
Anatomy In Clay Learning System	Civil Air Patrol, National Headquarters	Fisher Science Education
Anatomy Warehouse	Clemson University	Fitzhenry & Whiteside Limited
Animalearn	Cognitive Surplus	Flinn Scientific, Inc.
Arbor Scientific	The Cornell Lab of Ornithology	Forestry Suppliers Inc.
Army Educational Outreach Program	Cradle of Forestry Int. Assoc/ Forest Service	Georgia Institute of Technology
Association of Water Technologies	CreositySpace LLC	Getting Nerdy, LLC
Attainment Company, Inc.	Department of Geosciences, Mississippi State University	Geyer Instructional Products
Backyard Brains, Inc.	Digitalis Education Solutions, Inc.	Girls Who Code
Bedford, Freeman & Worth HS Publishers	Discovery Dome	Grand Classroom
Beyond Benign	Discovery Education	Gratnells Ltd
Bio Corporation	Disney Youth Programs	Great Minds LLC
		Hamilton Bell Co. Inc.
		hand2mind
		Hayden-McNeil Publishing, Inc.



HHMI BioInteractive	National Flight Academy	Scholastic Inc.
Inq-ITS by Apprendis	National Geographic	Science from Scientists & Massachusetts Biotechnology Education Foundation
Insect Lore	National Geographic Learning   Cengage Learning	Science Take-Out, LLC
Institute of Food Technologists/Feeding Tomorrow	National Institute for STEM Education	Science, Naturally!
Insurance Institute for Highway Safety	National Institute of Neurological Disorders & Stroke	Search Associates
International Ocean Discovery Program	National Institute on Alcohol Abuse and Alcoholism (NIAAA)	ShareSpace Foundation
IPEVO INC	National Inventors Hall of Fame/Camp Invention	Simulation Curriculum Corp.
IRIS	Nebraska Scientific	Skulls Unlimited International, Inc.
Jones & Bartlett Learning	The NEED Project	Smithsonian Science Education Center
JoVE	NewPath Learning	Society for Neuroscience
Jumbo Minds, Inc.	Nomad Press	Soil Science Society of America
Kaleidoscope Adventures	NSTA Community Hub	Southern Science Supply
Kendall Hunt Publishing	NSTA 2021 Chicago National Conference	Speak Agent, Inc.
KidWind Project	NSTA New Orleans Area Conference	STEM Supplies
Killer Snails, LLC	NSTA Phoenix Area Conference	STEMI d.o.o.
KjdElectronics, LLC	NSTA Pittsburgh Area Conference	Swift Optical Instruments, Inc.
Knopf Doubleday	Nutrients for Life Foundation	SynDaver
Knowles Teacher Initiative	Oak Ridge Associated Universities	TCI
Lab-Aids, Inc.	Ohaus Corporation	TeacherGeek, Inc.
LabXchange, Harvard University	Omnicor (Wikki Stix Co.)	TERC
LaMotte Co.	OpenSciEd	Terrapin
Learn Engines	Paleontological Research Institution	Texas A&M University at Galveston
Learning A-Z	PASCO	Texas Instruments
Legends of Learning	PBS Learning Media/WGBH	Thames & Kosmos
Little River Research & Design	Pearson K-12 Learning LLC	therapeutic feet inc
Longo Associates, Inc.	Penguin Random House	trees for little people
Macmillan Adult	People for the Ethical Treatment of Animals	Tufts University Center for Engineering Education and Outreach
Macmillan Children's Publishing Group	Perimeter Institute	Tumblehome, Inc.
The Markerboard People, Inc.	The Pet Care Trust	TWIG EDUCATION LTD
Massachusetts Institute of Technology - Edgerton Center for Experiential Learning	PinBox 3000	University College at Washington University
Massachusetts Institute of Technology	Pitsco Education	USDA Natural Resources Conservation Service
Mast STEM Academy	PlayMada Games	Vaccine Education Center at Children's Hospital of Philadelphia
MatterHackers, Inc.	Population Connection	Vernier Software & Technology
McGraw-Hill Education	Project Lead The Way	W.W. Norton
Milestone C LLC	Project Learning Tree	Ward's Science
MiniOne Systems	ProjectEngin LLC	Wavefunction, Inc.
miniPCR	Publisher Spotlight	WETA
Molymod Models - Spiring Enterprises Limited	Rescue Critters	Wisconsin Fast Plants Program
NARIKA Corporation	Road Scholar	Worcester Polytechnic Institute (WPI)
Nasco	SAE International	World Wildlife Fund
The National Academies of Sciences, Engineering, and Medicine	Safari Club International Foundation	WorldStrides
National Center for Science Education		

# REGISTRATION & TRAVEL

1

## REGISTER



The fastest way to register 24 hours a day—register online at [www.nsta.org/bostonreg](http://www.nsta.org/bostonreg) with a credit card.



Fax your registration form\* and a copy of your purchase order to 703-243-3924.



Mail your registration form\* and payment to:

NSTA  
Conference Department  
PO Box 90214  
Washington, DC 20090-0214

\* Registration forms are available as PDFs at [www.nsta.org/bostonreg](http://www.nsta.org/bostonreg).

2

## HOUSING

**Boston Housing Deadline:**  
**March 9, 2020**

Make your hotel reservations now and save! NSTA has negotiated special discounted room rates with 14 hotels near the Boston Convention & Exhibition Center (the convention center).



Visit: [www.nsta.org/bostonhousing](http://www.nsta.org/bostonhousing) and have your credit card and arrival/departure information ready.



Call 877-352-6710 (toll free) or 801-505-4611 (international) between 7:00 AM and 6:00 PM Mountain Time, Monday–Friday. Be prepared to provide all the information on the housing form\*\*.



Mail CHECKS ONLY—Download housing form\*\* and mail with check (one form per room request) to:

**Orchid.Events–NSTA/Boston**  
175 South West Temple, Suite 30  
Salt Lake City, UT 84101

**Do not mail to NSTA.**

\*\*Housing form is available as a PDF at [www.nsta.org/bostonhousing](http://www.nsta.org/bostonhousing).

**Save \$90 on your registration when you become an NSTA member!**

## 3

## TRAVEL



NSTA has made arrangements with several major airlines to offer discounted fares to NSTA conference attendees. For complete details on these discounts as well as the best way to get around town, visit:

[www.nsta.org/bostontravel](http://www.nsta.org/bostontravel)

## PRICE LIST

EARLYBIRD	ADVANCE	ON-SITE
FEB. 21	MARCH 13	After MARCH 13

## FULL REGISTRATION (TWO TO FOUR DAYS)

NSTA Member	\$305	\$335	\$360
Member*	\$305	\$335	\$360
Nonmember	\$395	\$425	\$450
Retired NSTA Member	\$200	\$215	\$240
Full-time Student	\$120	\$135	\$160

## ONE DAY ONLY (THU, FRI, OR SAT)

Nonstudent (member or nonmember)	\$210	\$230	\$250
Full-time Student	\$90	\$95	\$105

## ONE DAY ONLY (SUN)\*\*

Nonstudent (member or nonmember)	\$130	\$135	\$140
Full-time Student	\$60	\$65	\$70

NONTEACHING SPOUSE/GUEST	\$130	\$155	\$175
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\* *Massachusetts Association of Science Teachers (MAST)*

\*\* *No exhibit hall hours on Sunday*

## REGISTRATION CATEGORIES

The **Member rate** applies to the following:

- Current NSTA members
- Nonmembers who submit an NSTA membership application and membership fee along with the registration form
- MAST members (Massachusetts Association of Science Teachers)—*MAST members receive the NSTA member rate for the 2020 Boston National Conference only*

NSTA members who are fully retired and have been an NSTA member for at least five years may register at the **Retired rate**.

Full-time students 18 years of age or older may register at the **Student rate** if the registration form is accompanied by a copy of a current university ID or a letter from the university indicating full-time enrollment.

Your nonteaching spouse/guest and children must be registered in order to visit the Exhibit Hall but do not need to submit separate registration forms. Please provide their names on your own registration form. Children of high school age and younger can be registered for free. **A fee is required for your spouse/guest.** College students and teaching spouses must submit separate registration forms and payment.

# VISIT THE NSTA STORE

Wednesday	4:00–7:00 PM
Thursday	7:30 AM–6:00 PM
Friday	7:30 AM–5:30 PM
Saturday	7:30 AM–3:30 PM
Sunday	8:00 AM–12 Noon

- ◆ Award-winning books filled with best practices, science content, teaching tips, and lesson plans.
- ◆ T-shirts, totes, and other science gifts to take back to your classroom.
- ◆ All attendees get member pricing—20% off all NSTA Press® products.



## COMMUNITY CONNECTIONS SHARE-A-THON

### WHEN?

Saturday, April 4, 2020 • 12:30–2:30 PM

### WHERE?

Boston Convention & Exhibition Center, Room 253AB

Come **engage** with organizations that bring you exciting resources, programs, and opportunities available to you from museums, after-school, media, and other informal science education providers!

- **Interactive** hands-on activities
- **Explore** new and engaging ways to connect with your students
- **Learn** about **FREE** programs and resources



# Join HHMI BioInteractive

for Workshops and Movie Night  
at the 2020 NSTA National Conference  
on Science Education in Boston  
Room 153B

## Thursday, April 2

8:00–9:30

Telling the Story of Island Biogeography  
with HHMI BioInteractive Resources

10:00–11:30

Enhance Science Practices and Data Literacy  
Using HHMI BioInteractive Resources

12:00–1:30

Group Work? No, Group-Worthy Work! Col-  
laborative Tasks with HHMI BioInteractive

2:00–3:30

Anchoring Life Science Lessons With HHMI  
BioInteractive Phenomenal Images

4:00–5:30

Get Glowing with Bioluminescence:  
Connections Across Scales with HHMI  
BioInteractive

## Friday, April 3

8:00–9:30

Solar-Powered Sea Slugs: Investigating  
Phenomena with HHMI BioInteractive

10:00–11:30

Using Models to Explain Population Growth  
Using HHMI BioInteractive Resources

12:00–1:30

Telling Engaging Stories with HHMI  
BioInteractive's Playlist Planning Tool

2:00–3:30

Modeling Biogeochemical Cycles:  
Exploring Ecosystem Dynamics Using HHMI  
BioInteractive Resources

4:00–5:30

Using HHMI BioInteractive Resources to  
Model Inclusive Literacy Strategies

## HHMI Night at the Movies

### The Serengeti Rules

Thursday, April 2, 6:00–9:30 PM

Ballroom East  
Boston Convention &  
Exhibition Center (BCEC)

Admission is free!  
Complimentary refreshments  
before the show.

## Saturday, April 4

8:00–9:30

Explore and Create Video Case Studies with  
HHMI BioInteractive Resources

10:00–11:30

Using HHMI BioInteractive Resources in a  
Sickle Cell Disease Storyline

12:00–1:30

Connect Life, Earth, and Physical  
Science Learning with Understanding  
Global Change

# 2020

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**EXPANDING THE VISION**

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**April 2-5, 2020**



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