



## CONNECTICUT SCIENCE CONNECTION

November 2017

**THE CONNECTICUT BUILDING A PRESENCE FOR SCIENCE NETWORK IS SUSTAINED THROUGH THE ADVOCACY OF THE CCAT, CONNECTICUT SCIENCE SUPERVISORS ASSOCIATION, THE CONNECTICUT SCIENCE TEACHERS ASSOCIATION, AND THE CONNECTICUT ACADEMY OF SCIENCE AND ENGINEERING**

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**NAMES AND E-MAIL ADDRESSES OF OUR POINTS OF CONTACT AND KEY LEADERS ARE NOT SHARED WITH ANY OTHER ENTITY**

### Resources



Connecticut Science Teachers Association

"...to inspire, promote and support the learners of science in the state of Connecticut."

Science Professional Development Opportunities! Are you interested in high quality, low cost, Teacher Professional Development opportunities? Visit the [CSTA website](http://csta.org) and click on Opportunities. You will not be disappointed. Contact us if you have questions.



SciJinks E-Newsletter

Click on the link to learn more about JPSS! <https://scijinks.gov/subscribe/>

### Green Teacher

Green Teacher has recently launched a YouTube Channel. In time, we hope this will grow into a valuable resource for educators.

<https://greenteacher.com/check-out-these-videos/>

**Upcoming webinars:** Check out these webinars at the following site:  
<http://greenteacher.com/webinars/>

### NSTA Safety Blog!

Science, technology, engineering, and math (STEM) students will be participating in hands-on activities and demonstrations, which means that safety must be addressed. For a safer and more memorable learning and teaching experience, check out the NSTA Safety Blog:

<http://nstacommunities.org/blog/category/safety>

**Do you know a great teacher of science in Connecticut?  
Someone who really reaches, encourages, and inspires students  
and helps fellow teachers to do the same?  
A colleague or even yourself?**

**Apply for the CSTA Excellence in Science Teaching Award.**

Deadline for nominations is Friday, November 22, 2017.

This award is bestowed on teachers who have not only demonstrated excellence in classroom science teaching, but who have also contributed professionally by providing workshops and/or other support for colleagues, have demonstrated dedication to personal and professional growth by participating in conferences and workshops, and have been productive participants in extra-curricular activities and community projects.

The Connecticut Science Teacher Association gives three 'Excellence In Science Teaching' awards each year: Elementary, Middle School, and Secondary.

These awards recognize and honor teachers who epitomize the highest ideals of the teaching profession by:

Being effective and innovative classroom teachers of science

Serving as role models for colleagues and providing outreach to colleagues through workshops, publications, school-wide projects, or special events.

Demonstrating a genuine commitment to personal and professional growth (life-long learning) by attendance and active participation at conferences, workshops, graduate courses, and in-service sessions.

Reaching out beyond their classrooms and using their knowledge and talents in community service programs and projects.

Teaching Experience: At least five years of successful science teaching.

Nomination: By one or more current members of CSTA or CSSA, or by self-nomination.

Approval: By a 90% vote of Award Committee members (preferably, and usually by unanimous acclamation).

Award: A commemorative plaque, a \$500 monetary award, and dinner for the awardee and a guest of his/her choice at the annual award banquet.

For additional information please contact Dr. Ralph Yulo Jr.  
Phone: 860-974-0599 or by email: [oluy@aol.com](mailto:oluy@aol.com) or go to [http://www.csta-us.org/awards\\_nominations.htm](http://www.csta-us.org/awards_nominations.htm)

Please [check the criteria](#) for the EST awards before nominating

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2017  
**Outstanding Biology  
Teacher  
Award Ceremony  
Honoring  
Janet Belval**

*South Windsor High  
School*

**Friday, November 17th  
6:30-8:30pm**

**The Jackson Laboratory  
for Genomic Medicine**

**Farmington, CT**

**RSVP**

<https://goo.gl/forms/E0Itl0aqET6Rug0F3>

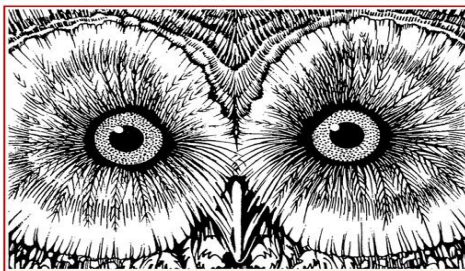
**Seminar: Innovations in  
Genome Technologies  
Advancing Cancer Genomics**  
Alyssa Lau, The Jackson  
Laboratory for Genomic  
Medicine

*Reception and Student Poster  
Session immediately following the  
Ceremony- Please let me know if  
you have student researchers who  
would like to present. The  
research does not have to be  
genome related.*

**Next Generation Science  
Standards**

<https://spaceplace.nasa.gov/menuparents-and-educators/scienceFairProjectIdeas>

Connecticut State  
**MUSEUM OF NATURAL HISTORY**



UNIVERSITY OF CONNECTICUT

**Black Bears In Connecticut:**

**When, Where, And How Many?**

Dr. Tracy Rittenhouse,  
Department of Natural Resources and  
the Environment, UConn  
Saturday, December 2, 1 pm  
Biology/Physics Building, Room 130,  
UConn, Storrs, CT. No registration  
required – FREE

**Uncovering Connecticut's Past:**

**Recent Discoveries from the Office of State Archaeology**

Dr. Brian Jones, State Archaeologist, Museum of Natural History, UConn .  
Saturday, December 9, 3 pm – Biology/Physics Building, Room 130, UConn, Storrs,  
CT. No registration required – FREE

**UConn's Edwin Way Teale Lecture Series  
on Nature & the Environment**

**Mining the Mountains – The Environmental Legacies of Coal Mining in Appalachia**

Dr. Emily Bernhardt, Department of Biology, Duke University  
Thursday, October 19, 4 pm – Konover Auditorium, Dodd Research Center, UConn,  
Storrs, CT

In this talk, Dr. Bernhardt will describe this long-term effort to quantify the cumulative environmental impacts of this ecoregion have been converted to active, reclaimed or abandoned surface mines. . She currently serves as the president of the Society for Freshwater

this Mountaintop removal coal mining is the dominant form of land cover change

<http://www.cese.uconn.edu/teale.html> - 860.486.4460

**The Edwin Way Teale Lecture Series brings leading scholars and lectures on nature and the environment.** Science, an international scientific society devoted to promoting the study of surface waters. in the Central Appalachian Mountains. No registration required – FREE **scientists to the University of Connecticut to present public**

**The New York Academy of Sciences** is proud to announce the release of its new Innovation Curriculum, a free resource to engage middle and high school students in authentic project-based learning!

Aligned to Next Generation Science Standards, this flexible curriculum teaches students how to solve challenges facing their communities—and communities around the world—by applying principles of scientific research and design thinking. Along the way, students will build STEM knowledge and develop 21st-century skills like critical thinking, creativity, collaboration, and communication.

Use the materials to support students competing in the [Future of Buildings and Cities Challenge](#) starting **October 19**, or run a challenge of your own!

**Download the Curriculum:** This FREE resource is available in two forms.

**Classroom Model:** designed to be implemented over 8–10 weeks, with in-class lessons (approximately 1–2 hours per week) and assignments for students to complete outside of class

**Workshop Model:** packaged as an intensive 1–2 day session, similar to a “hack-a-thon”

Collections of activities, articles, videos and more, for educators, families, students and anyone interested in teaching or learning about science.

<https://www.amnh.org/explore/curriculum-collections>

The following announcements are thanks to Ron Michaels at the State Department of Education: Please peruse opportunities throughout the state in the SCIENCE content area.

1. NGSS CSDE/CT Science Center Live Election Day 2017 Science PD event on November 7, 2017
2. Professional Learning Opportunities with our partner the CT Science Center including new workshops designed specifically for Administrators
3. CT Science Educators Annual Conference (CSTA/CSSA) Saturday, Nov.18, 2017 @ Hamden MS
4. JASON Learning opportunities
5. Connecticut Invention Convention (CIC) Educational opportunities

1. NGSS CSDE/CT Science Center Live Implementation Webinar on November 7, 2017  
Join the Connecticut State Department of Education and the Connecticut Science Center for an Election Day 2017 Science PD Web Event.

Kick off your day of professional learning with an NGSS update and Q&A session. At this unique online event, you can ask questions such as: What is the latest timeline for NGSS state testing? What are our options for professional learning? How should we be thinking about instructional materials? What does a reasonable NGSS transition plan look

like? What are some keys to successful NGSS implementation?

The live session will run from 8:15 a.m. to 9:15 a.m. on Tuesday, November 7th. Live participation is limited and cannot be guaranteed. Request a reservation at <https://fastfor.ms/8E932>. If you cannot participate live, a recording will be posted shortly afterward at <https://academy.ctsciencecenter.org>. Anyone can submit questions in advance at <https://www.surveymonkey.com/r/CTNGSSQuestions>.

## 2. Professional Learning with our implementation partner CT Science Center

### Next Gen Science Exemplar System Part I (NGSX)

- Hands-on, Expert-facilitated, Intro to 3-D learning/teaching
- 6 module series over 4 ½ days
- Tuition based (fixed costs)
- 36 hours of seminar-style instruction/participation
- Plans for several more “cohorts” have been announced

### NGSX Part II Taking it Back to the Classroom

- Hands-on, Expert-facilitated
- Focus on support of 3D learning sequences with instructional materials
- Possible grant funding available
- 24 hours of seminar-style learning (pre-req. Part I)
- Plans for several opportunities during 2017-2018

### PLANS - Principals Learn About, Network, and Support 3-Dimensional Science Learning

- Awareness PD designed for Administrators/Evaluators
- Expert facilitated
- 1 1/2 days

The link is as follows: <https://ctsciencecenter.org/education/mandell/ngsx-info/>

## 3. CT Science Educators Annual Conference (CSTA/CSSA) Saturday 11/18/17 @ Hamden MS

Please join us on Saturday, November 18, 2017 at Hamden MS.

Registration can be found at the following link:

<https://csta-us.org/event-2629170>

## 4. JASON Learning opportunities

Open Access to JASON Programs for Public School Educators & Students in Connecticut Through 2018 JASON Learning is a nonprofit whose mission is to inspire and educate students everywhere through real science and exploration. JASON offers hands-on labs, digital simulations and games, articles, videos, interdisciplinary connections, and powerful classroom management tool for teachers. Explore earth science, forces & motion, energy, climate, recycling, ecology, environmental science, oceanography, weather, wetlands and more. Register at [www.jason.org/ct](http://www.jason.org/ct) using your school email address for free access to JASON's award-winning curriculum.

Also visit our NGSS page: <http://www.jason.org/ngss> for guidance on what resources best support NGSS and lesson planning and classroom tools.

JASON Learning Professional Development for 2017-18 Check back at <http://www.jason.org/ct> for updates on dates and locations.

**NEW! Two-part Series: Resources and Tools for an NGSS Curriculum & Problems of Practice (Recommended for middle school)** Getting ready to or already designing your NGSS units of instruction? These two-part workshops will help educators build capacity to implement NGSS pedagogy, be introduced to resources, tools, and strategies that can be included in NGSS units of instruction, and pilot lessons and activities with opportunities to ask new questions, share out challenges, successes, and recommendations with a network of peers. Although selected investigations and resources from specific JASON curricula will be used to illustrate strategies and pedagogy, ideas and tools will be transferrable to other resources educators may be working with. During Day 1 of each program, participants will experience selected three-dimensional investigations and will resources, explore key JASON-NGSS teacher tools, and locate additional candidate resources for inclusion in NGSS units of instruction. Educators will take away actual lessons, ideas and strategies to use and pilot with students in the classroom. During Day 2, educators will share their experiences using the resources,

successes and challenges, and tips and strategies for integrating them into larger NGSS units. Sessions will also include strategies for connecting lessons and resources to other science disciplines through PE bundles. Participants must attend both dates. Three programs will be offered in 2017-18. Full descriptions coming soon at [www.jason.org/ct](http://www.jason.org/ct).

**JASON Basics – One Hour Live Webinars for Connecticut 3:00 – 4:00p.m.** Choose one: Thursday, November 9, 2017    Wednesday, January 10, 2018    Tuesday, March 6, 2018

Are you unsure of how to take full advantage of the free resources provided by JASON Learning? We understand the challenges of learning and implementing new lessons, especially when time is a limiting factor. Come join us for a one hour live webinar, customized for educators and administrators in Connecticut to walk-through the “basics” of the JASON site navigation, key teacher tools, and tips on how to find what you’re looking for to support instruction. This includes a 10-15 Q & A so educators can get the help they need to get started or continue using these resources. Register at [www.jason.org/ct](http://www.jason.org/ct).

**JASON Releases New Curriculum – World of Waves – Mission 1 online by October 1** Watch Promo video at

<https://drive.google.com/file/d/0Bz8yoOUPBg9xZFFuaHdyczRwSXM/view>

World of Waves is an innovative, career- and practice-focused middle school physical sciences curriculum, designed to build a deep, working understanding of the physics of waves and their importance in our world.

Students explore how sound, light and other electromagnetic waves are involved in engaging real-world phenomena, like surfing in the ocean, animal communication, and mobile networks. Through immersive, hands-on learning experiences gain:

- Foundational content knowledge and insights into expert applications of waves
- Critical and design thinking skills
- Data and modeling skills
- Experience with coding and engineering applications.

## Inspire Girls to Pursue STEM Careers!



### Program Spotlight: *STEMfems*

In this program, students use the Inquiry Arc to explore compelling questions relating to women in STEM. Students begin by exploring their own thoughts, feelings, and questions about women in STEM. They then examine the stories of successful Connecticut women in STEM fields, using their stories as case studies to explore the tension between the overwhelming obstacles that women in the field face and women's simultaneous ability to overcome these obstacles and contribute greatly to the field. The program concludes with a look at media bias against women in STEM and an exploration of how girls might overcome barriers in their own lives. [Fill out our request form](#) and book this program for your school today!





## Connecticut Science Educators Conference - Saturday, November 18

[Register](#)

[Exhibitor Information](#)

**Paul Andersen - Keynote Speaker**

More information: [BozemanScience.com](http://BozemanScience.com)

[NGSS videos](#)

[YouTube Channel](#)



***What Is Science Matters? Science Matters is an initiative by the National Science Teachers Association (NSTA) to bring content, news, and information that supports quality science education to parents and teachers nationwide. Science Matters builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional development opportunities. Building a Presence for Science—now Science Matters—reaches readers in 34 states and the District of Columbia. Why does Science Matter? Science is critical to understanding the world around us. Most Americans feel that they received a good education and that their children will as well. Unfortunately, not many are aware that international tests show that American students are simply not performing well in science when compared to students in other countries. Many students (and their parents!) believe that science is irrelevant to their lives. Innovation leads to new products and processes that sustain our economy, and this innovation depends on a solid knowledge base in science, math, and engineering. All jobs of the future will require a basic understanding of math and science. The most recent ten year employment projections by the U.S. Labor Department show that of the 20 fastest growing occupations projected for 2014, 15 of them require significant mathematics or science preparation to successfully compete for a job. This is why Science Matters. Quality learning experiences in the sciences—starting at an early age—are critical to science literacy and our future workforce. Feel free to publish this information in school newsletters and bulletins, and share it with other parents, teachers, and administrators.***