

March 2017

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

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

Resource



TRAINING!
From our
Guru of
Safety Ken
Roy!
Information

can be found at
[:http://www.wesleyan.edu/greenstreet/professionaldev/sciencesafety.html](http://www.wesleyan.edu/greenstreet/professionaldev/sciencesafety.html). Each registration includes a copy of Dr. Ken Roy's latest book – *Science Laboratory Safety Manual*. A \$99 value with over 450 pages of legal safety standards, best practices, and more for your reference! March 9, 2017 – Safety in the Next Generation Science Standards (NGSS) March 23, 2017 – Science Lab Safety and Liability for Administrators .



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://www.csta.org) and click on Opportunities. You will not be disappointed. Contact us if you have questions.

Marjot foundation will fund grades



9-11 in environmental research. CT students are eligible. Go to

www.marjotfoundation.org

Students in grades 9-11 from New England and New York are eligible for \$5000 research awards.

Application deadline is April 1, 2017

The UConn Integrated Pest Management (IPM) and Environmental Science curriculum kits are available at no cost to any teachers or other educators for use in their classrooms. Curriculum kits for grades K/1, 2/3, and 4/5 are available, and they can be picked up at UConn Storrs campus. The curriculum, and alignments completed by Mary Lou Smith, can be viewed on the [UConn IPM website](http://uconn-ipm.org). Please contact Donna Ellis (email donna.ellis@uconn.edu; 860-486-6448) for more information.



FIELD Activity: Look Up! It's the Winter Milky Way!

Dr. Cynthia Peterson, Physics, UConn, Friday, March 3, 7:30 pm – UConn. Directions will be sent to participants. Advance registration required: \$20 (\$15 for Museum Members and Donors) Adults and children ages 8 and above. Children must be accompanied by an adult.

Explore winter's night sky during this visit to UConn's historic planetarium. Learn how to identify the stars, planets, and other celestial objects observable throughout the season. Astronomy Professor Dr. Cynthia Peterson will offer a general orientation to the constellations, planets, and special celestial objects visible in the night sky using binoculars.

She will also discuss the upcoming total solar eclipse on August 21, 2017, the first time in four decades that the moon's shadow will cross the lower 48 states!

Weather and time permitting, the session will conclude at the Observatory to use binoculars and telescopes to observe a gorgeous quarter moon and possibly Venus and Mars. We will also look at celestial objects like globular clusters, open clusters, and any comets that happen to be wandering by.

For registration information please visit

www.cac.uconn.edu/mnhcurrentcalendar or call (860) 486-4460.

Delta Education is sponsoring a 2 day workshop event March 1 & 2 at Fairfield University for science supervisors to explore NGSS and the FOSS science curriculum. See the end of this newsletter for details and flier.

FOSS Preview Video: https://www.youtube.com/watch?v=u5gU_9B-ZTQ

Trail Construction & Maintenance Intern Positions Available for Summer, 2017

Do you know an 18-24 year-old who would benefit from a great outdoor experience this coming summer working on a Trails Crew to maintain Blue-Blazed Hiking Trails in Connecticut? If so, please let them know about this internship opportunity (training and a stipend are included):
<http://www.ctwoodlands.org/about-us/job-opportunities>



Science Teachers and Science Supervisors – As you know on Nov. 4, 2015 - The Next Generation Science Standards (NGSS) were adopted by unanimous vote of the Connecticut State Board of Education. There is a 5-Year NGSS Implementation Plan for transitioning curriculum, instruction and assessments.

In this way, teachers and their supervisors will need safety training to meet the challenges of both science and engineering investigation expectations in the NGSS. This is a reminder that Connecticut Science Safety Network (CSSN) of which the CSTA is an advisory board member, is sponsoring a new safety training program as follows:

Safety in Next Generation Science Standard(NGSS) NEW

Description: This workshop will help teachers learn how to incorporate safer activities into your NGSS-based curriculum experience in concert with mandated safety standards/regulations and better professional practices.. March 9, 2017, 9:00 AM-12:00 Noon, Middletown, CT To register - http://cirma.ccm-ct.org/Plugs/workshop_SftyNGSS_030917.aspx

It is critical that science teachers and their supervisors get this much needed training. Register as soon as possible!!!! If you have any questions, don't hesitate to contact Dr. Ken Roy, the seminar presenter at: safesci@sbcglobal.net. Hope to see you there!!!



American Association of Physics Teachers
Enhancing the understanding and appreciation of physics through teaching

Physics and Astronomy Teachers! American Association of Physics Teachers -- New England Section Meeting. Worcester, Massachusetts. Please consider attending one or two days of this evening of Friday, March 17 to late afternoon of Saturday, March 18th event. Registration and preview of some of the sessions accessible via link below:

<https://aapt-nes.wildapricot.org/event-2332622>



You are invited to participate in **FROGWATCH USA**, the Association of Zoos and Aquariums (AZA)'s citizen science program that provides individuals, groups and families opportunities to learn about wetlands in their communities by reporting on the calls of local frogs and toads! The Yale Peabody

Museum, Connecticut's Beardsley Zoo and the Maritime Aquarium are seeking volunteers to help monitor frog populations in wetlands near their homes during the spring and summer months. *The time commitment is just 15 minutes one or two times per week, one-half hour after sunset.* Adults and older children are recommended, as one-half hour after sunset can be after 9 p.m. in the summer.

Volunteers do not have to be frog experts as training is provided. Training is free for CDC volunteers and their families as well as members of the three institutions offering the training, regardless of which site is chosen for the session. Training is \$10 per family for others. Pre-registration is necessary at least one week ahead by visiting peabody.yale.edu/events/2017-frogwatch-citizen-scientist-registration and completing the online registration form.

The training dates and times are:

Wednesday, March 1

SNOW DATE: Friday, March 3

Connecticut's Beardsley Zoo

1875 Noble Avenue, Bridgeport, CT
7:00-9:00 p.m.

Wednesday, March 8

SNOW DATE: Friday, March 10

Yale Peabody Museum

170 Whitney Avenue, New Haven, CT
7:00-9:00 p.m.

Folks who have already been trained and just need a refresher can also attend free of charge. *Gian Morresi*, Educator, 203-394-6563

Connecticut's Beardsley Zoo



In New Jersey, their state dept of education has created an integrated model NGSS curriculum that is required in some specially funded districts and optional in others. To see the

topic sequence details and rationale , click on

<http://www.state.nj.us/education/modelcurriculum/sci/ms.shtml>.

if you click on the individual units for each grade level on the website, you'll find lots of useful info, including objectives, sources, and sequences. All the lesson plan resources they suggest are free!

UConn's Natural Resources Conservation Academy Environmental Program

We are excited to share with you three opportunities for teens, adults and teachers to engage in exciting environmental education programs through UConn's Natural Resources Conservation Academy (NRCA):

- 1) **Conservation Ambassador Program** for high school students
- 2) **Conservation Training Partnerships** for high school students and adults
- 3) **Teacher Professional Learning** for upper middle and high school teachers

Conservation Ambassador Program: The **Conservation Ambassadors Program** is great for high school students (grades 9 to 11) that are interested in the environment or science. Students engage in a fun and exciting field experience (**July 16-22, 2017**) at UConn, and design an individual community conservation project to provide real solutions for their communities. Then, they present their findings at the Connecticut Conference on Natural Resources at UConn.

2017-2018 Program Details

July 16-22, 2017: Field experience at UConn's main campus

June 2017-February

2018: Complete a conservation project in each student's own town, at their own pace under mentor guidance.

Mid March 2018: Present at the Connecticut Conference on Natural Resources. [Apply today!](#)

[Applications due April 1, 2017](#)

[Learn more about the Conservation Ambassador Program](#)

Conservation Training Partnerships: The **Conservation Training Partnerships** program is a new opportunity for high school students (grades 9 to 12) and adult conservation volunteers to form partnerships to address local conservation issues. Participants learn basic conservation concepts and online mapping technologies in a 2-day workshop, and then partner to carry out conservation projects in their town together. **This program is free to all participants!**

2017-2018 Program Details

July 10-11, 2017: Workshop at UConn's main campus

Or **July 13-14, 2017:** Workshop at TBD, New Haven, CT

July 2017- March 2018: The partnership completes a conservation project for any length of time in their own town

Please [visit the NRCA website for more information](#).

Teacher Professional Learning

3) **Teacher Professional Learning** for upper middle and high school teachers

Conservation Ambassador Program

The **Teacher Professional Learning** program immerses upper middle and high school science teachers in a 3-day professional development workshop on relevant local and regional water resource issues. The workshop will teach online mapping tools, and offer curricular and technological resources for participants to design 5-7 modules on a Water and Sustainability Science unit using specific Next Generation Science Standards' (NGSS) Earth and Space Science Performance Expectations. **This program is free to all participants!**

2017 Program Details

August 16-18, 2017: Workshop at UConn's main campus

[Apply today! Applications due April 1, 2017](#)

[Learn more about the Teacher Professional Learning program](#)

If you are interested in learning more about our programs, the NRCA is happy to visit schools or give brief presentations for students, teachers, and community members. Please contact nrca@uconn.edu or [860-486-4817](tel:860-486-4817) to find out more. We look forward to hearing from you!

Laura Cisneros, Program Coordinator, Conservation Training Partnership Teacher Professional Learning, **Abby Beissinger**, Program Coordinator Conservation Ambassador Program, Natural Resources Conservation Academy | University of Connecticut | [860-486-4817](tel:860-486-4817) | nrca@uconn.edu | nrca.uconn.edu



May 18, 2017 is Outdoor Classroom Day. What are your plans?? Sign up!

<https://outdoorclassroomday.com/>

CRISP is pleased to announce a workshop in March. Spaces are limited, so be sure to sign up today!
Saturday March 18^h | 9:00 – 3:00

Environmental Data Analysis with Connections to NGSS Saturday | March 18, 2017, 9:00 am - 3:00 pm
Southern Connecticut State University: Using natural life science phenomena and authentic data sets, participants will explore data collection and interpretation as well as various approaches to analyzing the data sets. Connecting this to the Next Generation Science Standards, teachers will be able to understand the process of construction, analysis, and interpretation of graphical displays paired with hands-on activities to incorporate into their lessons. Refreshments and lunch will be provided. Invited Presenters:
Susan Quincy, Environmental Education Specialist | CT Department of Energy and Environmental Protection, DEEP State Parks
Nicole Granucci, Curriculum Support Specialist | CRISP; Physics Faculty | Southern Connecticut State University View the flyer [2017 March 18. Spaces are limited, register HERE by March 1st.](#) For more info crisp.southernct.edu



The Walton National Sustainability Teachers Academy will provide two intensive workshops this June. These professional development opportunities are available to pairs of K-12 teachers (of any subject) from the same school or district. We are hoping to recruit teachers from your state who will lead the way toward a more sustainable future.

Teachers will learn about sustainability from expert scientists from ASU's Global Institute of Sustainability, collaboratively generate a plan of action, and receive

a comprehensive collection of lesson plans and teaching materials to implement in the classroom.

Each teacher who attends will receive a \$700 stipend with an opportunity to receive an additional \$300 for implementing a project in their school. Costs of meals, housing and travel are covered as well.

Please encourage teachers in your network to apply. For more information, please visit our website at:

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsustainability.solutions.asu.edu%2Fprograms%2Fteachersacademy%2F&data=01%7C01%7Ckohll%40easternct.edu%7C5475da67c5ad480506ad08d45b6faf01%7C00bc4ae8576c45e3949d4f129d8b670a%7C0&sdata=cCKGoYkmbMATXgjGRYGkdUQOMuToJPsg%2FwbpFVPG19Q%3D&reserved=0>

Don't hesitate to contact me with questions and please pass this material on to any teachers that might be interested.

Rob McGehee

Program Manager, National Sustainability Teachers' Academy Arizona State University Rob and Melani Walton Sustainability Solutions Initiatives P.O. Box 878009 Tempe, Arizona 85287-8009
P: 480.727.6473 | C: 602.618.1578

Register at www.jason.org/ct using your school email address for free access to JASON's award-winning curriculum. 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.

Contact Amy O'Neal at amy@jason.org or 860-885-4688 with questions.

Do you know of a deserving scientist in your community? CALL FOR CONNECTICUT MEDAL OF SCIENCE NOMINATIONS – DUE DATE: March 11, 2017 – 4:00 p.m. In 2017, the Connecticut Medal of Science, Connecticut's highest honor for scientific achievement in fields crucial to Connecticut's economic competitiveness and social-well-being, will be awarded. This Medal recognizes an individual who has made extraordinary contributions to the advancement of science in Connecticut. For this competition, science spans the physical and biological disciplines as well as mathematics, engineering and the social and behavioral sciences. Modeled after the National Medal of Science, the award is bestowed in alternate years with the Connecticut Medal of Technology.

Selection of the annual Medalist is overseen by the Connecticut Academy of Science and Engineering. Medal recipients will be permanently featured in a Hall of Fame at the Connecticut Science Center. Use the [Online Form](#) for submitting nominations.



If you are interested in Modeling Workshops™, please visit our website: <http://tinyurl.com/2017modeling>.

FREE WORKSHOP for all High School & Middle School Science Teachers, Curriculum Directors, Administrators, and Department Chairs ! Hosted by East Bay Educational Collaborative (EBEC) and Lab-Aids, Inc. Nearly half of the high school NGSS Performance Expectations directly reference data use in one form or another. But how well are we preparing today's students for this data-driven future and how will you support the data demands—scientific practices, core ideas, and cross-cutting concepts—of the NGSS? Learn how to accomplish this for your students!

Online advance registration by March 1, 2017 is required
Date: March 24, 2017 **Time:** 8:00am - 2:45pm
Place: EBEC, 317 Market St, Warren, RI

SEVEN GREAT WORKSHOPS OFFERED BY THE CT. DEEP THIS MARCH AND APRIL. Registration is open for the following workshops. : Each workshop provides participants with: An educational resource guide Supplemental materials for classroom use Certificate of Participation Resource support for further implementation All workshops engage educators in the use of materials and provide demonstrations, small group work and applications to NGSS and Common Core implementation. Materials support educator planning initiatives and direct use in classrooms through investigations and real world explorations. Fee for each workshop is \$40.00 per educator with discounts provided for multiple registrations from a single site. All workshops take place at Kellogg Environmental Center unless otherwise noted. Details at registration link. [Register here!](#)



National Institute of Environmental Health Sciences (NIEHS) recently developed a Climate and Health learning module for use in high school classrooms interested in exploring the health impacts of climate change. The module promotes learning about the complex interactions between climate change, the environment and human health and uses content from the US Global Change Research Program's 2016 report, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. The materials are available free of charge and can be adapted for other grades and informal educational settings. The module integrates multiple science and engineering practices, disciplinary core ideas, and cross cutting concepts for earth and life sciences. It was designed with *Next Generation Science Standards (NGSS)* in mind. *Materials are available at: <http://www.niehs.nih.gov/lessonsclimatechange>* Additional NIEHS developed environmental health and science training materials can be found at: <https://www.niehs.nih.gov/health/scied/teachers/> National Institute of Environmental Health Sciences (NIEHS) recently developed a Climate and Health learning module for use in high school classrooms interested in exploring the health impacts of climate change. The module promotes learning about the complex interactions between climate change, the environment and human health and uses content from the US Global Change Research Program's 2016 report, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. The materials are available free of charge and can be adapted for other grades and informal educational settings. The module integrates multiple science and engineering practices, disciplinary core ideas, and cross cutting concepts for earth and life sciences. It was designed with *Next Generation Science Standards (NGSS)* in mind. *Materials are available at: <http://www.niehs.nih.gov/lessonsclimatechange>* . More materials can be found at: <https://www.niehs.nih.gov/health/scied/teachers/>

A Sea Vegetable Saga
 Anoushka Concepcion
 Connecticut Sea Grant and Cooperative Extension, UConn
 Sunday, February 19, 1 pm – Biology/Physics Building, Room 130, UConn
 No registration required - FREE
 Adults and children ages 8 and above. Children must be accompanied by an adult.

Interest in sea vegetables is increasing for both their nutritional and environmental benefits. While the majority of products meant for human consumption are imported, efforts are underway to support domestic production of sea vegetables for food. Sea Grant has supported nearly 30 years of research on the cultivation of local, native species and is now helping interested aquaculture businesses apply the research findings to grow new sea vegetable products in Connecticut and beyond. Join Anoushka Concepcion, Assistant Extension Educator in Marine Aquaculture, who will tell the story of why sea vegetables and their cultivation has become popular in recent years and the industry's current status.

www.cac.uconn.edu/mnhcurrentcalendar — (860) 486-4460
 Find us on [Facebook](#)

Want to get started in an inexpensive Robotics program for your students? (STEM)

And/or maybe also enter a team in a national competition?

upcoming ROV workshop to be held at CCSU on March 25th with MATE (Marine Advanced Technology Education). www.marinetech.org
This is appropriate for educators teaching students in grades 5-6, Middle School, or beginning High School. The day-long workshop will instruct teams of teachers attending from the same school to plan, build & test their own "Angelfish" ROVs. Held at CCSU, an up-to-date classroom will supply all of the tools and components needed. The afternoon will be spent testing the educators ROVs in the CCSU pool.

The engineering and design process will be used to design and build the ROVs. We will enhance the session with help from STEM related presentations from MATE. Participants will be able to take their ROV chassis home with them (not the electronic parts, however) and they will receive instructions and other materials from MATE.

Space is limited and we are placing emphasis on enrolling teams of two educators from the same school. (If you don't have a "partner", register by yourself.)

Here is the link to the flyer:

<https://www.manchestercc.edu/content/inuing-education/excursions-in-learning/catalogs/> (scroll

down from "Spring 2017 Catalog")

The flyer also includes an application form to be sent into Carleigh Schultz from Manchester Community College. Please do not hesitate to contact me with any questions.

Ed Argenta

edandpat74@comcast.net (860) 871-2884

Carleigh Schultz

cschultz@manchestercc.edu (860) 512-2804



April 5, 2017, 9:00 am – 3:00 pm, Fort Trumbull State Park, New London CT

What is Clean Air all about and why is it important?

Help grade 5-12 students understand air science and the steps that are taken to measure and improve air quality for all. Learn how to integrate STEM concepts with Citizen Science and environmental investigations.

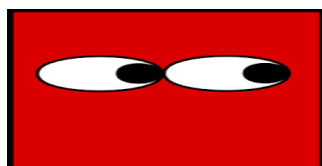
This hands-on workshop will provide educators with:

- ❑ Background on Air Science
- ❑ Introduction to Air Quality Monitor and Air Now website
- ❑ Lesson Resources to implement air quality and science in the classroom
- ❑ A set of flags for use at your school (\$60 value—one set per school)
- ❑ Instructions for implementing the Air Quality Flag program with students
- ❑ Resource contacts for assistance in education or air quality monitoring
- ❑ Participation in the CT Green LEAF Program

Registration is required. Contact Susan Quincy 203-734-2513 or [register on line](#).

Fee for participation is \$40.00 per educator or **free for current Green LEAF Schools and FE3 facilitators.**

Information to sign up as a Green LEAF School at www.ctgreenleaf.org or contact Laurel Kohl at KOHLL@easternct.edu



We are looking for **10** middle school life science teachers (grades 6-9) to field-test BSCS's *Three-Dimensional Teaching and Learning for Middle School Science (3DMSS)*, an NSF-funded unit on body systems with professional development for teachers. 3DMSS, developed in collaboration with

Oregon Public Broadcasting, incorporates:

- an emphasis on using evidence to construct an understanding of disciplinary core ideas and crosscutting concepts
- video-based lesson analysis professional development
- rich media experiences to promote understanding of difficult concepts

Field-test teachers are critical in helping us design and improve programs like 3DMSS. The field test runs September 2017 to December 2018. Teachers will receive a \$2,000 stipend over the two academic years for their participation. If you are interested in being a field-test teacher, visit www.bsccs.org/3DMSS-field-test for more information and to apply online. **Deadline to apply: March 1, 2017. Please complete your application as soon as possible. We will begin reviewing applications as they are received.** Questions? Please contact Jon Adams at jadams@bsccs.org.



Small World Initiative Partner Instructor Application – High School

If you are a biology/environmental/life science teacher and interested in doing research in May focused on sustainability/conservation in the rainforest in Costa Rica –this opportunity would be for you!

Any teacher can apply to the Costa Rica experience at

www.chance.psu.edu

However, for a scholarship opportunity through Penn State (\$6500 stipend):

With the research that you do in Costa Rica, Penn State will be supporting you through PD to develop classroom research projects based in NGSS/PA standards and provide you materials you need to implement your classroom research project. PA teachers around the Pittsburgh area are encouraged to apply as the PD will occur in Pittsburgh and at University Park upon your return. For further details about this piece go to:

<http://www.csats.psu.edu/overview-of-csats-programs/research-experiences-for-teachers>

We also have research placements at University Park and Westinghouse this summer ranging from \$5000-\$6500.

Amanda J. Smith, M. Ed **STEM Outreach & Engagement Liaison, Center for Science and the Schools**

Phone: 814-867-3183 fax: 814-865-8067

ajs398@psu.edu

<http://csats.psu.edu>

California Education and the Environment Initiative: The California Education and the Environment Initiative (EEI) is a free K-12 curriculum that teaches critical skills in science and history-social science using environmental topics, such as water and energy, as a lens.

The EEI Curriculum makes learning relevant and fun for students by engaging them in topics they care about – the air they breathe, the water they drink, and the food they eat. All content is California State Board of Education-approved and helps support Common Core and Next Generation Science Standards. Use the free EEI Curriculum to build your students' understanding of their relationship to the environment and prepare them to be critical thinkers and 21st century problem solvers.

<http://www.californiaeei.org/>

WANT TO GO TO SAN FRANCISCO THIS SUMMER? The Exploratorium Teacher Institute (TI) has been the professional development home for middle school and high school math and science teachers since 1984. TI's mission is to create and support a collaborative community of teachers, at all levels of their careers, through professional development that joyfully emphasizes the teaching and learning of science as a process for understanding the world around us. Each year, more than a thousand teachers attend TI workshops and programs designed to provide opportunities for them to ask questions as learners, share expertise as practitioners, and develop as leaders. Find out [more about us](http://www.exploratorium.edu/education/teacher-institute/about).

<https://www.exploratorium.edu/education/teacher-institute/about>

Interested in participating in a Teacher Institute program? There are opportunities for both new and experienced teachers. All program participants are provided with stipends for attending our institutes and workshops.

[Summer Institute https://www.exploratorium.edu/education/teacher-institute/summer](https://www.exploratorium.edu/education/teacher-institute/summer)

The dates for the 2017 [Summer Institute](https://www.exploratorium.edu/education/teacher-institute/summer) are June 19 to July 7, 2017. The application is open now through March 15, 2017. [Apply now!](https://www.exploratorium.edu/education/teacher-institute/summer/2017-application)

[Application https://www.exploratorium.edu/education/teacher-institute/summer/2017-application](https://www.exploratorium.edu/education/teacher-institute/summer/2017-application)

If you are a middle school or high school science teacher with at least three years of teaching experience, then attend our annual Summer Institute and immerse yourself in the Exploratorium's philosophy of inquiry-rich, hands-on teaching. Engage with phenomena using science and engineering practices, build small versions of Exploratorium exhibits for your class, and join a community of educators dedicated to employing the best practices in experiential science education. The exploratorium is in San Francisco. P.S. There is a stipend if accepted.

CLIMATE COST PROJECT'S 016/2017 WITNESSING CHANGE VIDEO COMPETITION.

The competition gives advanced high school and college students an opportunity to document local impacts of climate change, educating themselves, their communities, and the public. In addition to the video contest, the Climate Cost Project provides interdisciplinary educational materials on the economics of climate change, including a specialized climate change economics game and 101 environmental economics chapter. You can find out more about the competition, and our work and mission, in the short video further below, and on our [website](http://www.youtube.com/edit?o=U&video_id=YWaB3wbNuCQ).

We hope to see some of your student's submissions in the spring, and of course please get in touch with us if you have any additional questions.

https://www.youtube.com/edit?o=U&video_id=YWaB3wbNuCQ



Attend a
FOSS
Workshop

Exploring the Next Generation

When:

Wednesday, March 1, 2017

for Elementary educators

9:00am to 12:00pm

Registration: 8:30am

Wednesday, March 1, 2017

for Middle School educators

1:00pm to 4:00pm

Registration: 12:30pm

Where:

Fairfield University

Faber Hall Dining Commons

1073 N Benson Road

Fairfield, CT 06824

Registration:

These workshops are offered for FREE, but space is limited to 32 educators.

Register at:

<http://tinyurl.com/March1CTFOSSNG>

Register by: February 22nd

Please contact Jenn Reid with any registration questions:

jenn.reid@schoolspecialty.com

800.338.5270 x3453

For more information about FOSS in CT, contact: Jacob Kane

Jacob.Kane@schoolspecialty.com

585.354.6888

Science Standards

The **FOSS leadership team** from the **Lawrence Hall of Science** and

Delta Education are pleased to offer two **awareness** workshops for elementary and middle school administrators, curriculum directors, science coordinators, specialists, and science lead teachers. Please come and explore how instructional materials designed for the *Next Generation Science Standards* can build understanding of the disciplinary core ideas (DCI), engage in science and engineering practices (SEP), and develop crosscutting concepts (CC).

Choose to attend one or both sessions

Session one (9am to 12pm): K-5

Topics addressed

- Engaging with the three dimensions of NGSS
- Connections to Common Core ELA with first-hand investigations
- Exploring instructional design and conceptual frameworks
- Experiencing effective implementation strategies for teachers

Session one (1pm to 4pm): Middle School

Topics addressed

- Engaging middle school students in science and engineering practices
- Developing understanding of core ideas in science
- Teaching strategies, active investigations, using science notebooks, assessment, literacy components, and online activities will focus on the three dimensions of NGSS

Lunch will be provided between sessions.

The **Monday, March 1st** sessions are designed for educators not currently using FOSS. If you are a FOSS user, see the invitation to the sessions on **Tuesday, March 2nd**.



Judges who care about fostering creative problem solving in our youth are needed! No experience necessary! [CLICK HERE TO REGISTER](#)

Once again we invite our friends to judge at multiple CIC Regional events and the 34th Annual 2017 Connecticut Invention Convention. in this video:

To register as a judge click here: <http://www.cicregistration.org/judges/>

Note, if you have been told you are a CIC Finals Sponsor Judge, select your

IF YOU HAVE ALREADY REGISTERED as a judge, simply forward this email to others who want to foster creativity in our youth. We have included a Judge Recruitment Poster to help you. Simply click on the link, print, and display at your company! Your friends and colleagues will thank you!

[Judge Recruitment Poster](#)

Thank you for your help and support, Judging Coordinator

judgesinfo@ctinventionconvention.org CIC Hotline: (860) 793-5299

Please follow us on



TO GET THIS YEAR'S DATES

Visit our website www.ctinventionconvention.org

ANNOUNCING GENES IN SPACE 2017 – DESIGN AND LAUNCH YOUR DNA EXPERIMENT TO SPACE!

We invite students in grades 7 through 12 to design DNA experiments for space. Students will pioneer DNA research on the International Space Station to address real-life challenges of deep space exploration. Five finalist teams will receive mentoring from Harvard and MIT PhD scientists, present at the 2017 International Space Station R&D Conference, and receive miniPCR DNA Discovery System™ for their education institutions. Winners will also attend Space Biology Camp and send their DNA experiment to space! Submission deadline is April 21st 2017.

Genes in Space is a partnership between miniPCR, Boeing, Math for America, CASIS, and New England Biolabs. The contest is free, and does not require equipment. Proposals will be judged solely on their creative and scientific merit. miniPCR DNA Discovery System™ will also be awarded to the top 5 teams from grades 7 and 8 (Junior Scientist Awards) and to the school with the highest number of submissions from each of the 5 US regions (Constellation Awards).

Teachers – Here's how you can turn contest submissions into a class assignment that's aligned with national standards.

Find us on the web at [GENES IN SPACE Web site](#)



MoDRN (Molecular Design Research Network) from Yale, developed a number of materials for HS teachers. These hands-on classroom exercises can be used by educators to introduce the topic of safer chemical design through inquiry based learning. The topics can be easily integrated into any existing science curriculum or can be allied health – based curriculum. We also matched the modules

so they are aligned with Next Generation Science Standards. (see the attachments)

In addition to these exercises, we developed a database with the science fair ideas which teach the concepts of green chemistry and sustainability.

All materials are free of charge and can be accessed through our website, but I wanted to send some sample pdfs for the ease of distribution. Attached you will find six modules, which can be also accessed online.

Our website address is <http://modrn.yale.edu/education> and under high school curriculum you will find the above mentioned materials. I do hope that your network will find them useful, and if possible, please forward to the annual conference participants. And while none of my colleagues is available this weekend, we hope to start building relationship with HS teacher network.

Finally, our collaborators from University of Washington will be sending a follow-up e-mail to NSTA participants who were part of our workshop in early November.



Earn graduate credit this spring with [Seminars on Science](#), the American Museum of Natural History's online professional learning program. The 6-week [online courses](#) are co-taught by Museum scientists and classroom educators and are accessible anytime on your schedule. Get access to cutting-edge research, rich content, and powerful classroom resources. [Graduate credit](#) is available from our university partners.

The [next session](#) starts March 20. Save \$50 when you use code SCIENCEMATTERS. Plus, register by February 20 to save another \$50 for a total \$100 savings! Courses in the life, Earth, and physical sciences include *The Brain*; *Climate Change*; *Earth: Inside & Out*;

Evolution; *Genetics*, *Genomics*, *Genethics*; *The Ocean System*; *The Solar System*; *Water* and more. For more information about the program, check out *Seminars on Science* at amnh.org/learn. If you have any questions, send us an email at learn@amnh.org or call (800) 649-6715.



ETHNICALLY-DIVERSE CONNECTICUT TEACHERS!

Enhance your environmental education methods and knowledge.

We are awarding SIX 80% Scholarships for summer 2017

WHAT: Sharing Nature: An Educators' Week Workshop

WHERE: Hog Island Audubon Camp, Muscongus Bay, Maine

WHEN: JULY 16 - JULY 21, 2017

SCHOLARSHIP: \$900 towards \$1,095 registration fee (Price includes program, lodging, boat travel, all meals)

Features of Educators' Week:

- * Designed for science and non-science educators to generate exciting ideas for creating and incorporating environmental education activities into your curriculum.

- * Inspiring and experienced instructors will share their favorite approaches, methods, and activities for engaging you, and your students, with nature.

- * Workshop presentations and guided field trips on the island share techniques in field biology, art, music, photography, theater, journaling, and other disciplines.

Interactive workshop: "Increasing Diversity in Environmental Education" led by Chandra Taylor Smith, Ph.D. Vice President, Community Conservation and Education, National Audubon Society. TO APPLY: E-mail letter of interest and names & contact info. of 2 professional references to Camp Director Pete Salmansohn at psalmansohn@audubon.org.

Awards given on a rolling basis, so early application is strongly suggested.

For details, photos, videos about the camp visit:

[audubon workshop information](#)

Green Teacher

Upcoming webinars

Check out these webinars at the following site: <http://greenteacher.com/webinars/> where you can also learn how to access *Green Teacher's* previous 65+ webinars.

To Unplug or Plug In, Presenters: Justin Hougham and Steve Kerlin
Monday, March 27th 7:30-8:30pm EST

Time to Depave Paradise?, Presenter: Alix Taylor
Wednesday, April 12th 2017 7:30-8:30pm EST

Best Practices in School Gardens, Presenter: Mary Dudley
Wednesday, September 27th 2017, 7:30-8:30pm EST

Eco-System Monitoring Programs, Presenter: Daniel Shaw
Wednesday, October 25th 2017, 7:30-8:30pm EST, [Register](#)



BERMUDA NEXT SUMMER!!

Interested in a professional development workshop this summer from June 26-July1 in Bermuda at the Bermuda Institute of Ocean Sciences? Learn the latest in data collection techniques including ocean "gliders." Also learn how to plan and implement a field study course at BIOS for your students.

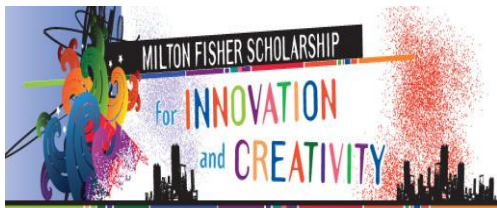
Contact Ed Argenta at: Edandpat74@comcast.net or Kaitlin Baird at: kaitlin.Baird@bios.edu for more information.

Go here for the program flyer:

<http://www.bios.edu/education/educator-workshops-at-bios/>

Here is a great synopsis of what is happening that relates to the goals of a science education in Connecticut! Do not let the politicians tell you we are not doing well in our State with science and technology. Every science teacher should see the opportunities and achievements in our State. A link to an electronic edition of the CASE Bulletin is shown below:

http://www.ctcase.org/bulletin/31_4/31_4.pdf Take a look!



The Milton Fisher Scholarship wants to support students who excel as creative problem-solvers and to help make their higher education goals more accessible. We encourage you to read the short description about the scholarship below. Please forward this information along to any promising student applicants that you may know and/or to relevant staff members.

To access the online application, see answers to frequently asked questions and read

about previous winners, visit our website: www.rbffoundation.org **Applications due: April 30, 2017**

We offer up to \$20,000 (up to \$5000 per year for four years) the scholarship is open to exceptionally Innovative and Creative High School Juniors, Seniors and College Freshmen who are: • Graduating from a high school in Connecticut/New York City Metropolitan area (and plan to attend or are attending college anywhere in the U.S.)

OR • Graduating from a high school anywhere in the U.S. and plan to attend (or are attending) college in CT or NYC Apply for this scholarship if you are . . . • a student who has solved an artistic, scientific, or technical problem in a new or unusual way, • a student who has come up with a distinctive solution to problems faced by your school, community or family, • a student who has created a new group, organization, or institution that serves an important need. The Milton Fisher Scholarship for Innovation and Creativity is administered by the Community Foundation for Greater New Haven.

NSTA Launches new Safety Blog!

With a new school year starting soon, 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 new NSTA Safety Blog:

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

Why use the Blog?

- To share up-to-date information on legal safety standards and better professional practices for a safer working and learning environment and a safer STEM instructional experience;
- To disseminate current information on safety incidents occurring in K–12 classrooms, labs, and maker spaces;
- To provide support and initiate dialogue in efforts to answer safety-related questions from bloggers, either teaching or supervising in K–12 classrooms, labs, and maker spaces.

Anyone can subscribe for free! Just go to the blog address above and scroll down to the bottom of the page. Follow instructions for a complimentary subscription!

NEW MATERIALS, PROJECTS NASA <https://www.nasa.gov/audience/foreducators/index.html>



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.