



## CONNECTICUT SCIENCE CONNECTION

May 2019

**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**



Professional Development Opportunities! Are you interested in

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



click to [Join the CSSA](#)



MIT will again be hosting the week-long Science and Engineering Program for Teachers (SEPT)

this year in the end of June. You can learn specific information by going to <https://sept.mit.edu/> The MIT Club of Hartford will again be sponsoring one teacher to attend the program this year. If you are interested, go to the website for the application, fill it out and send it to Dr. Avi Ornstein at [ornstein@alum.mit.edu](mailto:ornstein@alum.mit.edu)

NSTA NEWS! A members-only community forum is now available for NSTA members! An opportunity to share ideas, express opinions, ask questions about the proposed name change. Click here to sign in and join the conversation. Not a member?

[join here!](#)



## CONNECTICUT STEM FOUNDATION SCHOLARSHIPS

CONNECTICUT STEM FOUNDATION, INC.

Did you know that The CT STEM Foundation offers up to \$1,000 in scholarships to encourage both middle school and high students to participate in STEM studies? But wait, there's more! The Foundation also offers two \$1,000 scholarships to graduating seniors who participate in the CT STEM Fair.

In keeping with its mission to engage pre-college Connecticut students in multiple STEM activities, the foundation offers two summer scholarships to undergraduate science students planning to attend a college/university summer STEM course, a summer internship, an informal science education program or a tuition high school summer education program. Depending upon tuition and expenses, up to \$500 is granted for each scholarship. One is awarded to a rising sophomore, junior or senior high school student. The other is awarded to a middle school student.

Another aspect of the foundation's mission is to provide support to graduating seniors planning to major in a STEM related field in college. Two \$1,000 scholarships are awarded to applicants who participated in the current year's CT STEM Fair.

Additional information, including scholarship application forms and the deadlines for submission, are available on the CT STEM Foundation's website, [ctstemfoundation.org](http://ctstemfoundation.org), under the Scholarship section.

**CSTA Election Nomination Time!** Would you like to get more involved with CSTA/NSTA? Are you interested in promoting Science Education in Connecticut? Directors are responsible for attending board meetings, typically held 8 times/year in Rocky Hill. They also must actively participate on committees and promote science education. The following Board position terms are currently up and available to be filled by members: County Directors: Hartford, New Haven, New London, Windham \*\*\*\*\*Level Directors: Elementary, Middle, High School, Magnet/Charter, Independent, Parochial, Retired.

You may self-nominate. Please contact Pat Ruane at [pat.o.ruane@gmail.com](mailto:pat.o.ruane@gmail.com) if you are interested or want more information.  
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# CSTA and CSSA Awards Dinner for Excellence in Science Education and Supervision

Wednesday, May 8,  
2019, 5:00 PM -  
8:30PM New Haven Lawn  
Club

More information can be found at  
[CSTA website](#)

**UConn's Natural Resources  
Conservation Academy  
(NRCA) The Conservation  
Training  
Partnerships** (<http://nrca.uconn.edu/students-adults/index.htm>)  
program pairs teens and adult  
volunteers. The team participates  
in a 2-day field workshop ([find a  
workshop near you!](#)), and learns  
to use conservation and mapping  
tools in field activities. Then, the  
team designs and carries out a  
local environmental project. CTP is  
free to all participants.



Power of  
Data GIS  
Workshop at  
Louisiana  
Tech, July 15-  
19, 2019.

Learn how to

use ArcGIS and incorporate  
Geospatial inquiries in your STEM  
lessons. \$750 stipends available  
for grades 6- 12 teachers in using  
ArcGIS. Sign up here  
<https://goo.gl/forms/81j175qZAaEBC8VD2> Or for more information,  
go to  
<https://www.latech.edu/2019/04/11/college-of-education-to-host-power-of-dataworkshop/>. Contact  
Chris Campbell at [ctc@latech.edu](mailto:ctc@latech.edu)  
if you have any questions.



NESS Summer Camp runs Mondays through Fridays for 10 weeks (June 24 - August 30). The half-day and full-day programs are open to students ages 4-17 and located in Stonington, CT.

NESS's summer camp offers a unique combination of on-the-water and in-the-classroom lessons intended to spark curiosity, enhance learning, and encourage students to step out of their comfort zones. Summer programs include courses in sailing, marine science, adventure sports, and powerboating.

## Adventure Sports

Our adventure sports offerings for students ages 9-17 include surfing, fishing, stand up paddle boarding, powerboating, boogie boarding, and more. There will be plenty of hybrid adventure sports classes in which students can experience a combination of different sports within one class. We will once again be offering fishing every week! From sport fishing for those advanced fishers to junior fishing for our youngest anglers, there is something for all our fish enthusiasts. Finally, this year we are offering programs for older students who may want to follow in our educators' footsteps! We are excited to introduce ACA Kayak training and Junior Lifeguarding (non-certifying) courses for students 11-17!

## Sailing

As always, we will continue to offer sailing classes appropriate for students ages 6-16 at all skill levels, from the novice sailor to the advanced racer. For our more experienced sailing students we will have a few foiling classes for some high-speed sailing opportunities! These classes will utilize our Waszp and UFO sailboats.

## Marine Science

After a successful summer of swim classes for the Little Aquanauts last year, we are expanding to offer our first Bay Bounders swim class! These classes are designed to build confidence and comfort in the water. For our older marine science enthusiasts, we have all new courses for our ocean explorers (ages 8-10) and marine biologists (ages 11-15)! We are excited to continue our collaborations with nearby organizations and will be running our partnership programs with Project Oceanology, the Mystic Aquarium, and Denison Pequotsepos Nature Center! Registration will open on February 1 when you can see all our programs and register [online!](#) Classes fill fast, so interested families are encouraged to sign up as soon as possible. Need-based financial aid is available to make the ocean accessible to all, please call or email to learn more (860-535-9362 | [office@nessf.org](mailto:office@nessf.org)).

JASON LEARNING EVENTS!! **FRI, MAY 24 8:30 AM**, World of Waves (Grades 4,6-8), Thomas Edison Middle School, Meriden  
<https://www.eventbrite.com/e/world-of-waves-grades-46-8-registration-60427291656>



Partner with  
a chemist  
who can  
help provide

support inside and outside the classroom through the AACT Science Coaches program. This is a unique opportunity for teachers to work closely with a chemist who can: provide advice on real-world applications of lessons, demos, or experiments; help develop and enhance lesson plans; promote inquiry-based learning; serve as a science mentor; support classroom-based experiments; and more. Applications are open now through September 1. Learn more and apply 8. AACT webinar, May 9, 6:00 pm CT Science Coaches. Join Adam Boyd, AACT Program Director, as he outlines the advantages for teachers and chemists who participate in the Science Coaches program.  
**REGISTER**



## Teachers – Win \$1,000 for Virtual Reality Equipment for your Classroom

Sponsored by Fios.Verizon.com

Looking for a new way to make learning fun for your students? Eligible K-12 teachers may apply for a \$1,000 grant to use toward the purchase of Virtual Reality (VR) equipment to use in the classroom.

Help your students engage with educational content through the interactive learning experiences of VR headsets. Studies suggest that education through VR can improve knowledge retention, concentration and understanding. Take your students on virtual field trips or build a new skill in a safe environment – the options for immersive learning with VR equipment are limitless. Share your unique plan to use VR technology for education and you could win \$1,000 toward VR equipment for your classroom! **How to apply**

1. Read the eligibility guidelines (listed below) to ensure your classroom is able to receive grant funding.
2. Complete the online application with the required information.
3. Write a brief lesson plan (500 word max. and must be written in English) that creatively details how you would use Virtual Reality (VR) equipment in your classroom to enhance the education experience.
4. Submit your application and lesson plan [online here](#) by the deadlines: 11:59 PM ET on May 21st 2019. Late submissions will not be accepted.

**Submission guidelines:** We'll be choosing two (2) grant recipients of \$1,000 for VR equipment for classrooms based on the following criteria:

- **Creativity:** Is your educational plan original, creative and fun for students? Does it combine VR technology with carefully designed lessons to engage students and promote learning?
- **Feasibility:** Can your plan be reasonably carried out in the classroom? Will the lesson plan and VR experiences be implemented within the current or upcoming school year?
- **Age appropriateness:** Will the VR technology be used for age-appropriate activities? Is your plan to use VR in the classroom tailored to fit the needs of K-12 students?
- **Measurability:** Can you measure the success of VR learning in your classroom? Will there be corresponding tests, assignments or other measures of student knowledge and participation?
- **Eligibility:** Does your lesson plan fit within the word count limit (500 word max. in English) and is your application fully completed? Full eligibility description available below. [Click Here](#) for the Online Grant Application

Sponsored by Fios.Verizon.com

More information about this opportunity can be found here:

<https://fios.verizon.com/beacon/2019-tech-teacher-grant/>



# Residential Summer Workshops at the University of Connecticut's School of Engineering *The daVinci Project*

July 15-19, 2019

Introducing our students to engineering is a national need. Most students love to be creative and to connect academics to the real world.... this is what engineers do while making technologies that solve serious world problems. The UConn School of Engineering is holding its 19<sup>th</sup> annual daVinci Project. It is a weeklong (Mon-Fri) residential series of hands-on workshops for middle and high school science and math teachers. This year it's being held July 15-19. Teachers live on campus and participate in one of 8 very engaging workshops, as well as many other seminars, a variety tours through research labs, our state of the art water reclaim and wastewater facilities, and our CoGen plant.

Come and be part of an exciting week of exploration! We have 33 fellowships available. Please share this professional development opportunity with the other STEM teachers in your school or district. Workshop links below.

1. [Innovative Underwater Robotics for STEM projects](#) – 8 Fellowships available
2. [Mathematical Optimization with Applications to Smart Grid and Intelligent Buildings](#) – 10 Fellowships available
3. [Understanding Pain: Sensory and emotional stimulus to your brain](#) – 2 Fellowships available
4. [Bioinformatics: Using Computer Science to Understand Life](#) – 3 Fellowships available

5. [Monitoring and Maintaining Stream Health in a Developed Watershed](#) - 2 Fellowships available
6. [Air Quality and Health: Building an Air Pollution Measurement Device with an Arduino®](#) – 2 Fellowships available
7. [From Geometry to Algorithms](#) – 4 Fellowships available
8. [Robots: Use in Industry and Elderly Assistance](#) – 2 Fellowships available

An on-line 2019 application and more information can be accessed at <http://edoc.engr.uconn.edu/davinci/>, **Registration deadline: June 15, 2019.**

Confirmation will be sent after your registration is received.

If you have questions or need further information please contact us at [engr-edpsw@uconn.edu](mailto:engr-edpsw@uconn.edu) or 860-486-5536.

[Register now](#) for this NGSS lesson planning

## Making Teaching Science Phenomenal!

Workshop presented by Peter McLaren

Saturday, May 18 9 -1

Irving Robbins Middle School  
20 Wolf Pit Rd., Farmington, CT 06032



Peter McLaren is the Executive Director at Next Gen Education, LLC. He is a well-known supporter of science teachers and was a member of NGSS Writing team

- What is a phenomenon?
- How does phenomena change across grades?
- Where do you find examples of phenomena?
- What is the role of analogous phenomena?
- Building a lesson from a phenomenon using the 5E Models.

Participants will get a taste of adapting a lesson by working on one of the phases of the 5E instructional model. Teachers are encouraged to bring along one of their lessons to adapt.

Cost - \$5 for CSTA/CSSA members

\$35 for non-members (includes CSTA membership)

Farmington teachers – Free by contacting Cindy Wilbur

**Register** – [CSTA-us.org](http://CSTA-us.org) by Tuesday, May 14

Any questions, please email [CTSciTeachers@gmail.com](mailto:CTSciTeachers@gmail.com)



EdAdvance is excited to announce an opportunity for teachers interested in the intersection between Science and Computer Science. With support from a new National Science Foundation grant, Skills21 is recruiting a cohort of teachers this year who want to engage their class in a CS challenge and present student team solutions at the 2019 Expo Fest on June 1, 2019

([expofest.skills21.org](http://expofest.skills21.org)).

Through the new Skills21 Science/CS challenge, student teams are compelled to develop a computer science product, service or solution leveraging a scientific discipline to meet a need, solve a problem or capture an opportunity. Student

solutions might include mobile apps, wearable solutions or other innovative uses of computer science.

Participating teachers will receive:

- \$1000 stipend for planning, out-of-class time engagement and curricular review
- \$500 for project materials
- Onsite coaching and professional development

Participating teachers will need to:

- Pilot and/or provide feedback on Computer Science infused Science units including lesson plans and an end of unit performance assessment
- Bring a team of students to the 2019 Expo Fest to compete in the new Science/CS Challenge
- Allow Skills21 to conduct pre- and post-intervention surveys (September and June)

What's the time commitment?

- In and out of class time commitments for teachers will vary based on individual class settings. Experienced Skills21 staff will work with prospective teachers to help gauge the required time commitment and investment

Priority Eligibility:

- First priority in the early stages of this grant are for teachers that work with traditionally underserved student populations

How to Get Involved

Interested teachers should contact Liz Radday ([radday@edadvice.org](mailto:radday@edadvice.org)) or Susan Auchincloss ([auchincloss@edadvice.org](mailto:auchincloss@edadvice.org)).

WE're NOT DONE Yet! Look below!



## KEYS TO SCIENTIFIC ACHIEVEMENT CONNECTICUT SCIENCE EDUCATORS ANNUAL CONFERENCE 2019

### SAVE THE DATES FOR OUR ANNUAL CONFERENCE!

**November 8th and 9th, 2019**  
**Heritage Hotel & Conference Center**

**Friday, November 8th: Special Session with Entertainment & Refreshments**

**Saturday, November 9th from 8:00 - 3:30 featuring:**

Workshops

Exhibitors

Networking

Giveaways

Light breakfast

Lunch Buffet

Beautiful Venue

Modern Meeting Rooms

President's Reception with Desserts & Door Prizes



### **Keynote Speaker: Okhee Lee**

Okhee Lee is a professor in the Steinhardt School of Culture, Education, and Human Development at New York University. She is currently leading collaborative research between New York University and Stanford University to develop instructional materials aligned with 3-Dimensional Learning to promote effective science education for all grades, K-12.





***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.***