

CONNECTICUT SCIENCE CONNECTION

February 2020

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

State Coordinator.David Lopath lopath@comcast.net , List Moderator..Eloise Farmer eloisef302@gmail.com

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

AWARDS Thanks to CSTA and to Maryann Zabik (CABT) for the notifications:



Professional Development Opportunities! Are you interested in

high quality, low cost, Teacher Professional Development opportunities? Visit CSTA.wildapricot.org and click on Opportunities. You will not be disappointed. Contact us if you have questions.
CSTA.wildapricot.org



Join the CSSA!
www.cssaonline.org
All Teacher leaders

welcome You do not have to be in a formal Supervisor Position, but should be interested in helping keep your colleagues informed on the latest in science education.

BOOKMARK THIS SITE!

The Connecticut State Department of Education wants to provide valuable resources to the field and is continually working to make these resources easy to find in one central location. Therefore, beginning January 1, 2020, the CTCoreStandards.org website will no longer be operational. All of these resources have been moved to the CSDE website at <https://portal.ct.gov/SDE>. They can be accessed under K-12 Education, Academics, CT Core Standards. The direct link is <https://portal.ct.gov/SDE/CT-Core-Standards>. Please bookmark this for future reference.



Please nominate outstanding teachers and educators for one of the following awards offered by CSTA , CSSA, and NABT All information AND application forms can be found on both the CSTA and CSSA web sites - CSTA-us.org, or

www.CSSAonline.org .

CSTA Excellence in Science Teaching Award

- Elementary
- Middle
- Secondary

New!; Ralph and Ruth Yulo New Teachers Award

- For teachers of all levels (elementary, middle, or secondary) in their first three years of science teaching

- Fred J. Scimone Outstanding Science Supervisor Award (CSSA)
- Dr. Sigmund Abeles Science Advocate Award (CSTA and CSSA)
- Connecticut Science Educator Fellow (CSEF)(CSTA and CSSA)
- Babu George STEM Award (CSSA and Sacred Heart University)
- Lifetime Achievement Distinguished Educator Award
- =====



NABT
National Association of
Biology Teachers

Each year the National Association of Biology Teachers presents the Outstanding Biology Teacher Award to a high school biology teacher from each state. Please take this time to nominate an outstanding high school biology teacher from

Connecticut for this prestigious award. Nominations must be submitted by **March 15, 2020. To obtain a form for applications, please click on:**
<https://nabt.org/Awards-NABT-Award-Nomination-Form>

The Connecticut Department of Education is one of the state partners coordinating this year's Girls Go CyberStart Program (GGCS).

Girls Go CyberStart (GGCS) is a free, online program offering high school girls the skills they need to become cybersecurity pros. The program has already helped 10,000 girls take on the challenge, but it's on a mission to help even more young women gain the knowledge they need to start a career in cybersecurity. Join as an Advisor to run a Girls Go CyberStart Club in your school! Find out more at https://www.girlsgocyberstart.org/?utm_source=email&utm_medium=email&utm_campaign=CTSA&utm_content=L1.

If you have participated as a school-level GGCS club advisor in the past, we want to thank you for your and ask you to participate as an Advisor again and/or share this request with your colleagues who may be interested. Last year our state had a total of 755 students compete in GGCS from 30 high schools and clubs from across Connecticut. This year our goal is to exceed that number. As a GGCS Advisor, you will play an important role in continuing to give students the opportunity to explore cybersecurity.

The program is free and will give teachers hours of interactive resources to use in and outside of their classrooms, supporting their students as they learn awesome cybersecurity skills. Teachers can register to run a GGCS Club between

December 2, 2019 and February 14, 2020 (extended from original deadline of January 31, 2020). When you register as an Advisor, you'll receive a free digital resource pack to help you set up and run your Club. Then, you can guide your students through the program and watch them fly!

Can we count on you to register a club for Girls Go CyberStart 2020? There are some new features to Girls Go CyberStart that we want to make you aware of:

- Registration for Advisors and clubs opened on December 2 for Advisors. This year Advisors must register their Club first then give their club access code to students to register. Also, please note the timeline for Girls Go CyberStart is different than last year. You can register and see the program details at www.girlsgocyberstart.org.
- GGCS will be running a Club of the Week recognition competition. Beginning December 2 until February 14 (extended from the original registration deadline of January 31) clubs are encouraged to share a picture of their club and what they are excited to learn during GGCS on social media with the #GirlsGoCyberStart hashtag. Each week Girls Go CyberStart will choose the Club of the Week and recognize them on social media and email. Also, the club will be rewarded with Girls Go CyberStart swag and a cybersecurity speaker from Microsoft! Let's have a club from Connecticut named Club of the Week!
- For more information see the info sheet in this newsletter or visit and register at Girls Go CyberStart: <http://bit.ly/GGCS-WebinarReg>.
- There are lots of resources designed to help you set up and run your club this year. They can be found at <https://resources.girlsgocyberstart.org/>
- Just a reminder, boys can also discover their interest and learn with CyberStart Game. Clubs that have five girls who qualify for Stage 2 of Girls Go CyberStart will also earn 40 additional non-competitive licenses for boys or other girls in their school.

Thank you again for supporting Connecticut students in learning about cybersecurity and foundations of computer science. We hope we can count you in to participate in Girls Go CyberStart 2020! Register today at

https://www.girlsgocyberstart.org/?utm_source=email&utm_medium=email&utm_campaign=CTSA&utm_content=L1.

THE FOLLOWING PAGES ARE FLIERS FOR THESE INITIATIVES, and A FLIER FOR ACTIVITIES SPONSORED BY THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

girls go cyberstart

What does Girls Go CyberStart do?

There is a huge shortage of cybersecurity experts in the United States. To bridge this gap, Girls Go CyberStart's mission is to give high school girls the chance to discover whether they have an aptitude for computer science and cybersecurity through a fun, free and interactive online program full of digital challenges. Through Girls Go CyberStart, students can explore exciting career opportunities in the field, join the global cybersecurity community, and learn the techniques they need to keep our country safe online.

Hear more about it

Find out more about the free program through webinars, which will be hosted on December 3 and December 18 at 3pm ET, 3pm MT, and 4pm PT.

- Each webinar will be between 60 and 90 minutes long, and no experience is necessary.
- The webinars will cover various topics, including basic program information, equipment information and example walkthroughs, as well as a Q&A.
- Register here: <http://bit.ly/GGCS-WebinarReg>

CyberStart Compete top scoring team prizes:

Nationally:

1st prize = \$400 per team member and \$250 for their school

2nd prize = \$300 per team member and \$250 for their school

3rd prize = \$200 per team member and \$250 for their school

Each State:

1st prize = \$100 per team member and \$100 for their school

2nd prize = \$75 per team member and \$100 for their school

3rd prize = \$50 per team member and \$100 for their school

Program dates

Registration: December 2, 2019 – January 31, 2020

Advisors can set up and invite students to their Clubs from this date.

cyberstart assess

January 13–31, 2020

A set of fun, interactive challenges that represent realistic scenarios and threats. Students who solve five or more challenges will qualify for CyberStart Game.

Prize: For every girl who qualifies for CyberStart Game, their Club will receive one entry into a prize draw for a chance to win \$1,000. At the end of CyberStart Assess three lucky schools will be awarded \$1,000!

cyberstart game

February 10 – April 17, 2020

Students play as 'Cyber Agents', solving digital crimes and dissecting a cyber criminal's digital trail. Top scoring Clubs in CyberStart Game will qualify for CyberStart Compete.

cyberstart compete

April 23–24, 2020

National Championship for Girls Go CyberStart

Qualifying teams compete against schools nationally in an online 'Capture the Flag' for National and State titles, along with prizes and recognition from their State's Governor.

TWIST Program

Teachers Working in Science and Technology

When your students ask...

When am I ever going to use this?

What do engineers do?

Why do we have to work together?



How do you answer?

TWIST teachers: Spend 6 weeks doing R&D with a 3M scientist or engineer and their team

- Tour labs and pilot manufacturing facilities
- Receive a stipend of \$4500
- Can earn graduate credit through St. Mary's University of MN (*MN and WI only*)

Program Dates: June 15-July 24, 2020

Minnesota Applications Due: January 17, 2020

Outstate Applications Due: February 21, 2020

Applications accepted from Science, Math, and Tech Ed teachers of students in grades 7-12.

Any Questions? e-mail twist@mmm.com or check out our website at

http://www.3m.com/3M/en_US/gives-us/education/

Once on the website scroll down

Direct link to the Teacher Application: http://go.3M.com/twist_application

TWIST is a partnership with the Minnesota High Tech Association



“This experience will help shape learning experiences in my classroom going forward.” Class of 2019

QeST UnConference/SciCamp NSTA CT Share-Out

Saturday, May 2nd, 2020, 8 a.m. to 1 p.m.

Quinnipiac University | School of Education, EDU187
370 Bassett Road, North Haven, Connecticut

We invite you to...



- Bring the practices and resources you've experienced at NSTA's National Conference in Boston this year and share them with other CT science teachers.
- If you are unable to attend the NSTA conference, come to learn from others! Attend sessions and take the practices and resources back to your classroom.

A light breakfast and coffee will be served.

Register through this link: <https://bit.ly/38amWnA>

Sponsored by:

QeST  LC

Quinnipiac
UNIVERSITY

Women Take Flight

Saturday March 7, 2020 10:00am to 4:00pm

Celebrate women in aerospace, participate in hands-on STEM activities
Climb aboard historic aircraft, use flight simulators, and more!

Featuring Rebecca J. Waddington

Deputy Chief of Flight Operations
NOAA Aviation Operations Center

Commander Waddington made history in August 2018 when she was part of the first all-female flight crew to pilot a NOAA aircraft during a hurricane mission. She made history again in September 2019 as part of NOAA's first all-female three pilot flight team while flying reconnaissance missions over Hurricane Dorian. As a NOAA Commissioned Corps "Hurricane Hunter," Commander Waddington is passionate about serving her country and is proud to be an inspiration for women in aviation.

Lectures: 11:30am and 1:30pm

Public Meet and Greets: 10:30-11:00am & 2:30-3:00pm



Meet over one hundred pilots, engineers, servicemembers, and aerospace industry professionals from:

- 377th Airlift Squadron & 439th Airlift Wing of Westover
- Air Force Recruiting Service
- Air Force ROTC
- Bombardier Hartford Service Center
- Collins Aerospace Systems
- Connecticut Soaring Association
- Experimental Aircraft Association (EAA) Chapter 166
- Federal Aviation Administration (FAA)
- Kaman Corporation
- New England Section of the 99's
- Pratt and Whitney
- Sikorsky Aircraft
- Society of Women Engineers Hartford Section
- TAC Air Bradley International Airport
- UConn Mechanical Engineering Department
- United States Coast Guard Auxiliary
- Wright Sisters Engineering Club
- Women in Aviation Connecticut Chapter
- Women in Transportation Seminar CT Chapter

Museum Admission

\$16.00 Adults (ages 15-64)

\$14.00 Seniors (ages 65 and older)

\$10.00 Youth (ages 4-14)

Children 3 and under admitted free

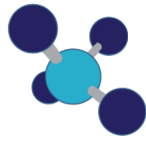
Discounted admission available for pre-paid groups of 10 or more.

Register at www.neam.org by March 5, 2020.



Women Take Flight is supported in part by

New England Air Museum
36 Perimeter Road Windsor Locks, CT 06096
(860) 623-3305 www.neam.org



Science and Engineering
Program for Teachers

2020 Updates for MIT Alumni Clubs November 2019

SEPT SUMMER 2019 RECAP

"I am beyond thankful for this opportunity. I have gained so much from this experience. I hope to be able to attend again in the future, as I feel the SEPT program is always reinventing itself based upon trends. I would really like to see where many of the concepts and lectures progress too. Rik, Mary and Kristina, and the many others that made this a memorable experience, I can't thank you all enough!! This has been an eye opening week!! I wish you all the best and thank you again!!" -SEPT 2019 Participant

"Thank you for everything. This was one of the best experiences I have had during my entire teaching career. I feel so fortunate to have had this opportunity." -SEPT 2019 Participant

[My SEPT 2019 Experience- Blog Post by Ana Paula Mauro \(SEPT 2019 Attendee\)](#)



2020 Tracks- July 6th- 11th

Every summer since 1989, MIT has worked with MIT Alumni Clubs to bring outstanding middle and high school teachers to the MIT Science and Engineering Program for Teachers (SEPT). This year we have three simultaneous tracks of afternoon workshops:

Track 1: "Broadening Participation in STEM"

Lead by: Jennifer Gardony (Program Manager at Scheller Teacher Education Program, MIT)

This track will support teachers in their acquisition of skills needed to coach and encourage student populations that have been traditionally underrepresented in STEM fields. Afternoon programming will consist of workshops, reflections and discussions focused on increasing and maintaining participation in STEM for women, students with disabilities, ethnic and racial minorities, and other underserved communities.

Track 2: "Bringing Project-Based Learning & Inquiry into STEM Classrooms"

Lead by: Alex Hargroder and Alice Liao (Project-based Learning Coach's and Designer's, MIT)

This track will provide small and large moves that teachers can make to help make their class more student-centered by increasing inquiry and giving students voice and choice.

Afternoon sessions will include introductions and use of existing and in-development tools, simulations, games, technology and curriculum that can be brought into various contents and classrooms.

Track 3: "Use and Design of Games and Simulations"

Lead by: Rik Eberhart (Studio Manager at the MIT Game Lab)

This track will inform teachers in the use and design of games and simulations, of use in classrooms to support both systems learning and computational literacy.

Afternoon sessions will include introductions and use of existing and in-development tools, simulations, and games, as well as workshops in game design and game programming. (Prior knowledge of programming and computer science is NOT required).

Important Dates and Numbers:

November 1- Application Live- [How to apply](#)

February 28 – Deadline for Clubs to send top 3 applications to SEPT

March 14 – SEPT notifies Clubs of accepted teachers

July 6th- July 11th - SEPT DATES

Number of teachers admitted for 2020: 60

Teacher selection and MIT Alumni Club sponsorship

Each year, teachers from around the world apply to attend SEPT. Typically, an MIT Alumni Club is involved by:

1st, recruiting teachers to apply;

2nd, selecting, ranking, and submitting 3 top candidates; and

3rd, covering the tuition and/or travel costs of the teacher(s). 2020 Tuition \$1,600

We look for educators who meet the following criteria:

- Teach science, technology, engineering, and/or math to students in 6th-12th grades.
- Integrate technology in their classrooms, particularly technology that enables students to create.
- Demonstrate innovation in their teaching practice and advancement through past professional development or other extracurricular experiences.
- Are able to commit to attend all sessions of the time intensive program, including evening programs and sleeping in dorms.
- May have an affiliation with MIT, or express interest in longer-term involvement with SEPT or Alumni Club K-12 outreach.

SAVE THE DATES!

Connecticut Science Safety Network CSSN Spring 2020 Workshop Calendar



Each workshop is contingent on a minimum enrollment.

All workshops instructed by internationally recognized science laboratory safety compliance specialist Dr. Ken R. Roy

❖ Cost per workshop: \$200/Person

❖ **Workshop Location:**
Connecticut Science Center
250 Columbus Blvd
Hartford, CT 06103

❖ Check-in:
Begins at 8:30AM

❖ Register online at
www.ctsciencecenter.org/education/m-andell/sciencesafetyworkshops

Workshops sponsored by CSSN in association with the:

- Connecticut Interlocal Risk Management Agency CIRMA
- Connecticut Science Center
- Connecticut Science Teachers Association
- Connecticut Science Supervisors Association
- Connecticut State Department of Education

DATE

March 2,
2020

9:00AM-
12:00PM

SNOW

DATE

March 9,
2020

TOPIC

Critical Topics in Science Laboratory Safety for Science Teachers, CHOs & Their Supervisors

Under the OSHA Lab Standard, all school employees working in science labs are required to receive appropriate safety training. The focus of this workshop is to address critical lab safety topics addressing biological, chemical and physical hazard including chemical labeling & storage, spill cleanup, chemical disposal, electrical safety, bio-pathogens, PPE protocols, safety acknowledgement forms, appropriate engineering controls, liability and much more based on legal safety standards and better professional practices.

To Register [Click Here](#) or
<https://formstack.io/1AFFA>



The NSTA National Conference on Science Education is in Boston, MA, April 1st through 5th, 2020.

There are opportunities to volunteer at the conference! If you can volunteer 8 hours for more to receive a reduced registration fee or 16 hours or more for complimentary registration. [This volunteer form](#) must be completed by Saturday, February 15th, 2020 in order to receive your registration voucher in time. After this date NSTA may not be able to honor the reduced registration voucher or volunteer opportunities may no longer exist.

Please complete this [volunteer form](#) as soon as possible as dates on the calendar and opportunities to volunteer fill fast.

NSTA National Conference and Professional Learning Institutes Scholarships—Boston, Massachusetts

The Northrop Grumman Foundation Professional Learning Scholarship Program is an opportunity for teachers within a 100-mile radius of Boston to apply for one of two scholarship opportunities.

Professional Learning Institutes (PLIs) are focused, content-based programs that explore key topics in science/STEM education in depth and are presented by experts in science/STEM education, professional learning, standards implementation, assessment, curriculum, and resources/materials development. Institutes are offered as pre-conference opportunities in conjunction with the NSTA National Conference on Science Education and require conference registration.

Scholarship Opportunity A: Full Conference Registration and a Professional Learning Institute Ticket

Full conference registration to the NSTA National Conference in Boston, April 2–5, 2020, and a ticket to attend a full-day Professional Learning Institute (PLI) on April 1, 2020 or a half-day Professional Learning Institute (PLI) on April 4, 2020.

This option is for new conference registrations only.

To qualify for the Conference Registration and PLI Scholarship you need to be:

- A full-time public middle school (grades 6–8) classroom teacher of science, technology or engineering working within a 100-mile radius of Boston.
- Able to attend the full NSTA National Conference in Boston, April 2–5, 2020, and also able to attend the PLI, which is a preconference all-day session on April 1, 2020, or a half-day PLI on April 4, 2020.

Apply for Scholarship Opportunity A [here](#).

Scholarship Opportunity B: Professional Learning Institute Ticket

A Professional Learning Institute (PLI) ticket (up to a \$175 value) for Boston area K–12 teachers attending the NSTA National Conference in Boston, April 2–5, 2020.

To qualify for a PLI Ticket Scholarship you need to be:

- A full-time public school K–12 classroom teacher of science, technology or engineering working within a 100-mile radius of Boston.
- Already registered for the NSTA National Conference in Boston, April 2–5, 2020, and able to attend the PLI, which is a preconference all-day session on April 1 or a half-day session on April 4, 2020.

Apply for Scholarship Opportunity B [here](#)

Information from Connecticut Center for Advanced Technology (CCAT)

"What's So Cool About Manufacturing?" (WSCAM) Video Competition: Open to high school teams across the state. Teams are matched with local manufacturing partners to collaborate on the creation of a short video that explains what is so cool about manufacturing. Students have the opportunity to learn about STEM/manufacturing careers, and build meaningful connections with future employers. You can learn more about the program through the website: <https://ctdidi.com/programs/wscam/>

Women of Innovation ®: An awards gala celebrating innovative women from industry and academia in the STEM fields across Connecticut. If you or your members know of an innovative woman in the secondary or post-secondary STEM fields, you can visit this link to learn more about nomination categories and to submit a nomination: <http://www.ct.org/woi-nomination-eligibility/> This is a collaboration between CCAT and the CT Technology Council, in association with CTNext.



The 2020 cycle of the [Presidential Awards for Excellence in Mathematics and Science Teaching \(PAEMST\)](#) is in full swing. The PAEMST Team is kicking off the 2020 Nomination Drive today and, to ensure its success, we need your help! By sharing PAEMST information on social media, forwarding this email to friends and colleagues, or nominating another great teacher yourself, you can help us honor the excellent educators you work with every day. Nominations can be submitted on the website, www.paemst.org. The nomination deadline is March 1, 2020. Attached you can find other [sample outreach materials](#). We also encourage you to access the [Facebook](#) and [Twitter](#) pages and share the Nomination Drive posts from NSF throughout the week.

Facebook: The 2020 Nomination Drive for the Presidential Awards for Excellence in Mathematics and Science Teaching (#PAEMST) begins this week! Do you know a K–6th grade science, technology, engineering, mathematics, and/or computer science teacher whose impact goes beyond the classroom? Help us celebrate the future of STEM education by nominating a teacher today! <http://bit.ly/2ZPk6lj>

Twitter: #PAEMST 2020

Nomination Drive is this week! Help us celebrate exemplars of STEM education by nominating a K–6th grade teacher today! <http://bit.ly/2ZPk6lj>

Should you have any questions about the program or the nomination process, please contact info@paemst.org or 855-723-6780.

REAL WORLD SCIENCE!

Applications are now being accepted for the 2020 cohort of Real World Science! The Real World Science Summer Teacher Seminar brings 28 teachers who will be teaching science to 5th-8th graders in the following school year to our museum for a weeklong training experience. Two of the spots are reserved for Louisiana teachers, and teachers from public and public charter schools are accepted. The teachers learn best practices in science teaching and 3D instruction while being introduced to the Real World Science curriculum. It includes a trip to the Laser Interferometer Gravitational Observatory in Livingston, LA, and a field day doing water quality studies at City Park and Lake Pontchartrain. Teachers are reimbursed for flight expenses, and the museum provides hotel accommodations and most meals.

This year's cohort will join us in New Orleans from July 12th-18th 2020. Applications are accepted from January 6th 2020 through March 13th 2020. Apply here (<https://nationalww2museum.submittable.com/submit/155881/real-world-science-summer-teacher-seminar-2020>)

For more information, email realworldscience@nationalww2museum.org



https://go.info.amplify.com/fy20-cklasor-webinar?utm_campaign=20200128_FY20_MultipleProducts_SOR_National_cklawebinars_webinar_National&utm_medium=dedicatedsend&utm_source=edweek



[Workshops for Educators on Manufacturing Careers](#) sponsored by the Connecticut Center for Advanced Technology

- Introduction to Manufacturing Careers for Educators
- Introduction to Additive Technologies for Educators - The world of manufacturing has exploded with advancements in 3D printing. Go beyond the basics of desktop 3D printing and learn the latest additive technologies used in aerospace, medical, sustainable energy and modern manufacturing industries to share with your students.



The Next Generation Science Standards and Universal Design for Learning



The authors of the Next Generation Science Standards explicitly name Universal Design for Learning as a necessary tool for the creation of units that are meaningful, accessible, and challenging for all students. Universal Design for Learning is a lens through which teachers can analyze curriculum goals, methods, and materials to ensure that there are multiple pathways to success for all learners. This workshop will review the structure of the NGSS and how to integrate Universal Design for Learning.

Date: 2/28/20

Time: 8:30 – 3:30

Location: 55 Van Dyke Ave Hartford, CT 06106

Price: \$125

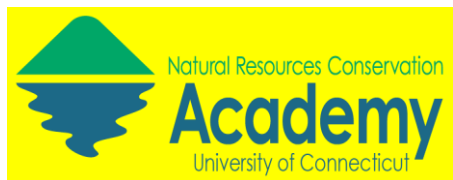
For workshop information, email Meg

Hanly mhanly@crec.org or

Lisa Fiano, lfiano@crec.org. For

assistance with registration, please contact the CREC Resource Group at 860-524-4040, or services@crec.org.

For special accommodations, please contact PD Support at 860-509-3787 or pdsupport@crec.org.



The Natural Resources Conservation Academy (NRCA) at UConn offers environmental programs for teens and adults. The Conservation Ambassador Program (CAP) teaches teens the skills used by professionals to address current environmental issues. Students learn real field-based science during an exciting weeklong summer field experience at UConn. Then, students design

their own environmental project to provide real solutions for their communities, and present their work at the Connecticut Conference on Natural Resources. For more details check out the CAP program video [here](#). The Conservation Training Partnerships (CTP) program pairs teens and adult volunteers. The team participates in a two-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. For more details check out the CTP program video [here](#). Online applications are now open! We are happy to visit schools & organizations to give brief presentations about our NRCA programs. Please contact nrca@uconn.edu to find out more

NESS ANNOUNCES LONG ISLAND SOUND DRAWING CONTEST

STONINGTON, CT. New England Science & Sailing Foundation (NESS) is looking for young artists to participate in a drawing contest for a calendar entitled “Long Island Sound and Its Watershed: What It Means to Me.” The contest is designed to engage youth in environmental stewardship and watershed conservation and is open to all Connecticut students currently in grades K-6. A panel of judges will choose two first place and two honorable mention winners from each grade as this year’s award recipients. Their artwork will be featured in a calendar in 2021.

Participating classes, schools, and individuals are asked to select one drawing per eligible grade to submit for judging and mail them to NESS no later than April 3, 2020. Individual children may submit a drawing on their own if the class or school is not participating. The contest is a great opportunity for parents and teachers to provide their students with a hands-on experience and to educate them about Long Island Sound and its watershed.

In the [2019 competition](#), over 2,500 talented young artists from across the state participated in the contest.

For full contest rules, please visit nessf.org/long-island-sound-calendar-contest. About NESS: The New England Science & Sailing Foundation, Inc. (NESS), is a nonprofit 501(c)(3) ocean adventure education organization that engages students in experiential learning to build confidence, teamwork, and leadership skills. Marine sciences, adventure sports, powerboating, and sailing are platforms for inquiry-based learning, personal discovery, teaching respect and responsibility for the sea, and creating connections with the community. NESS operates year-round with families, schools, and organizations to provide high-quality programs that blend an innovative curriculum with exciting ocean adventure activities. For more information, visit www.nessf.org.

###

JASON Learning is FREE for public school educators and students in Connecticut! JASON Resources can help supplement or build your three-dimensional Units of Instruction. Register or reactivate your account on www.jason.org/ct.

JASON Learning Upcoming Professional Development Offerings Resources & Tools for an NGSS Classroom Series:

Registration for all workshops at: www.jason.org/ct

JASON for Elementary (Grades 3-5)
February 26, 2020 – Eastconn,
Hampton 9:00am-3:30pm March 17,
2020 - LEARN, Old Lyme 8:30am-
3:30pm

Scientific literacy is important too!
For the first time, we are now
offering a professional learning
experience strictly for elementary
educators. This workshop will
specifically address strategies and
resources for integrating Next
Generation Science Standards
(NGSS) into the school-day while
connecting to reading, writing, and
math literacy. We will discuss and
address the challenges that face
elementary teachers when it comes
to including time for science
instruction, and offer concrete
resources and methods that can be
easily incorporated into already
existing routines. Participants will
further their understanding of what
it means to teach and learn in three
dimensions. Read full description at
www.jason.org/ct.

JASON for Early Elementary (Grades
K-2) – NGSS Resources, Pedagogy &
Practice February 20, 2020 - Salem
School, Salem 8:30am–3:00pm
Integrating science into the school-
day and engaging your students in
three-dimensional learning and Next
Generation Science Standards
(NGSS) doesn't have to be daunting.
Join us as we address the challenges
that face early elementary educators
when trying to integrate science
experiences into the classroom such
as lack of time and comfort level
with science content and standards.
We will provide educators with
strategies and resources for
integrating Next Generation Science
Standards (NGSS) into the school-
day while connecting to reading,
writing, and math literacy. Educators
will experience hands-on learning
activities and explore methods that
can be easily incorporated into
already existing routines. Read full
description at www.jason.org/ct.

Climate (Grades 6-8)

March 18, 2020 – Eastconn, Hampton

Come join us as we develop a systems model of climate and explore the
interactions between humans and earth systems. Meet STEM role models ranging
from NOAA climatologists to ocean explorers that are working to understand,
monitor, and predict Earth's climate. Read full description at www.jason.org/ct.



Connecticut
Science Center

Center for a complete description

Visit the web site of the Connecticut Science
Center for a complete description <https://ctsciencecenter.org/visit/events/>



Hartford
Audubon
Society

HARTFORD AUDUBON MINI-GRANTS:

The Hartford Audubon Society (HAS) is pleased to announce our annual Mini-Grant opportunity. The purpose of the mini-grants is to help fund and support initiatives within the State of Connecticut and especially within the Hartford

County area, which directly benefit the bird life in our state. It

is part of the Hartford Audubon Society's mission to awaken a wider public interest in the preservation and protection of avian wildlife and their habitat. Projects seeking up to \$2,000 are welcome, with preference given to smaller amounts. All projects must demonstrate some benefit to birds and/or birding in Connecticut. Past awards have included gardens for birds, raptor enclosures, and bird habitat development. Applications are due by 5 pm on February 7th, 2020. The brief application form and guidelines are provided on the HAS website at www.hartfordaudubon.org. Winners will be notified in March and receive checks shortly thereafter. Applications should be emailed to: hartfordaudubon@yahoo.com with "Mini-grant Application" in the subject line.

Questions? Email HAS President (and science teacher) Sarah Faulkner,
sffaulkner@comcast.net

2020 Grant and Scholarship Opportunities:

- **NEW!!** \$3195 Vernier Software & Technology STEM Fellowship for a HS/AP Science Educator
 - **NEW!!** One \$3195 Courtney Wilson GLOBAL EDUCATION Fellowship for a K-12 educator
 - Three \$1250 Morpho Institute EXPLORER scholarships for K-12 educators
- Academy Fee of \$2695 includes pre-departure prep, resource kit, & in-country land costs (air is not included). Space is limited to 30 educators. Get the details and download a syllabus and scholarship application at:
www.morphoinstitute.org/educator-academy

Questions? Contact:

Christa Dillabaugh, Morpho Institute Director

Email: info@morphoinstitute.org

Phone: (913) 214-6126

The National Youth Science Camp is a

residential science education program for your STEM enthusiasts the summer after they graduate from high school. Students from around the country (two are chosen from each state) are challenged academically in exciting lectures and hands-on studies, and have voluntary opportunities to participate in an outdoor adventure program, gain a new and deep appreciation for the great outdoors, and establish friendships that last a lifetime. Students who are selected will attend the NYS Camp FREE of charge. The camp will run June 22 to July 15 2020. **The deadline to apply is February 28, 2020.** Two students from Connecticut will be chosen to

attend. Please contact us at ctsciteachers@gmail.com

NATIONAL MARINE SANCTUARIES WEBINAR SERIES

Catch and Release: Large whale entanglements and response efforts to mitigate the threat Entanglement or by-catch is a global issue that affects many marine animals, including large whales like the charismatic humpback whale. Hundreds of thousands of whales die worldwide each year, but the impacts go beyond mortality. When conditions and resources allow, trained responders under NOAA's Marine Mammal Health and Stranding Response Program attempt the dangerous task of freeing whales from life-threatening entanglements. However, the ultimate goal is to gain information to reduce the threat for whales and humans alike. The Hawaiian Islands Humpback Whale National Marine Sanctuary working closely with its partners and the community, coordinates response efforts for Hawaii, the principle breeding and calving ground of humpback whales in the North Pacific. The effort represents a unique and valuable opportunity to gain a broader understanding of large whale entanglement threat. Learn more about whale entanglements and response efforts from expert Ed Lyman. **This webinar series provides formal and informal educators with educational and scientific expertise, resources, and training to support ocean and climate literacy in the classroom.** Visit our [archives](#) to watch past webinar recordings.

More information on the series and upcoming webinars can be found [here](#). After registering you will receive a confirmation email containing information about joining the webinar. The Webinar ID is 462-571-163.

FOLLOWING IS A LONG LIST OF AVAILABLE GRANTS FOR TEACHERS AS LISTED BY THE NEW YORK STATE SCIENCE MATTERS COORDINATOR, NANCY RIDENOUR. WE HAVE HER PERMISSION TO SHARE THIS EXCELLENT INFORMATION...THANKS, NANCY!

- **Teaching and Learning Strategies for Higher Education** The 8-week Teaching and Learning Strategies for Higher Education online short course is delivered by Harvard's Bok Center for Teaching and Learning, in association with HarvardX. Students in this course will engage deeply with the most relevant research on effective teaching methods in the higher education context, while refining their own practices, portfolio, and teaching philosophy. Sponsored Program
- **Professional Development Grants For Teachers NEA Foundation Learning and Leadership Grants** Amount: \$2,000 to \$5,000 Description: The NEA Foundation for the Improvement of Education awards grants that support the professional development of public school teachers and faculty in public institutions of higher education. Grants may fund professional development experiences, such as summer institutes or action research, mentoring experiences or lesson study. Professional development must improve practice, curriculum and student achievement, and recipients must put professional leadership into practice by sharing what they learn with their colleagues. Grants cannot be used to fund a degree. For specific information, visit the NEA Foundation's application instructions .
- **Beacon Technology Teacher Grant** Amount: Up to \$1,000 Description: This grant is for teachers who need an extra bit of funding for classroom supplies, educational subscriptions, apps for students, and more. Beacon offers this grant 1-2 times a year. To be considered, submit a tech-focused lesson plan following their guidelines and instructions . Winners will also have their lesson plans featured on the Beacon blog!
- **Albert Einstein Distinguished Educator Fellowship Program** 5 Amount: \$6,000 monthly stipend, \$1,000 monthly living expenses Description: This grant is an excellent and unique professional development opportunity for K-12 teachers who have at least five years of experience teaching in STEM subjects. STEM educators participate in 10- or 11-month positions in federal agencies or U.S. congressional offices across the country, during which time they are given the chance to have a direct impact on education programming, policy and reform efforts. After the program, teachers return to the classroom with a deeper understanding of STEM education and experience that will enrich instruction and benefit students. You can learn more about the fellowship application on
- **Elmer's Teacher Tool Kit Grant** Amount: \$100 to \$500 Description: The Kids in Need Foundation External link , a leading organization aiming to provide free school supplies to students in need, has partnered with the educational product company Elmer's External link to create grants specifically for classroom supplies. The Teacher's Tool Kit Grant lets K-12 teachers in high-needs schools fund

classroom projects that aim to foster creativity and critical thinking in students. Grants are awarded based on financial need, a description of how the project meets the students' needs and the number of students who will be involved. The application is available on the Kids in Need Foundation's website.

- **ING Unsung Heroes Program** Amount: multiple awards Description: ING Commercial Banking External link established the Unsung Heroes in 1995 in an effort to recognize teachers implementing new teaching methods and techniques for improving student learning. The award application is centered on a description of previous projects teachers have worked on or plans they would like to enact in the future to benefit their classroom. Applications are judged on innovation, creativity and the potential to positively influence students. Each year, 100 finalists receive 8 \$2,000 grants, with at least one grant awarded in each of the 50 states. Of those 100 finalists, three winners are selected to receive awards of \$25,000, \$10,000 and \$5,000.
- **AIAA Foundation Classroom Grant Program** Amount: \$200 Description: The American Institute of Aeronautics and Astronauts is dedicated to the importance of STEM education and awards \$200 in grants to K-12 teachers who want to incorporate new ways of teaching science, technology, education and mathematics into their classroom. Funds can be used to purchase laboratory equipment, math and science software, robotics supplies, and other items that will add depth and dimension to your lessons.
- **NWA Sol Hirsch Education Fund Grants** Amount: \$750 Description: The National Weather Association aims to support the importance of meteorology in elementary, middle and high school by awarding grants to teachers who demonstrate a commitment to improving the quality of meteorology education, a science subject that is frequently overlooked. Funds may be used for the purchasing of materials or equipment, the establishment of community outreach science programs or professional development. You can apply for the grant by visiting the NWA Sol Hirsch Education Fund Grants website.
- **ACS-Hach High School Chemistry Grant** Amount: \$1,500 Description: The American Chemical Society External link gives innovative chemistry teachers the opportunity to put their ideas into action. The ACS-Hach High School Chemistry Grant was established to promote dynamic and engaging scientific exploration in students. It is awarded to high school teachers who wish to enhance classroom learning and raise students' interest in chemistry. Funds can be used to purchase laboratory equipment, supplies and instructional materials, but also the cost of professional development opportunities, field studies and science outreach events.
- **Delta Education/Frey-Neo/CPO Science Education Awards for Excellence in Inquiry-Based Science Teaching** Amount: \$3,000 Description: This is a grant offered by the National Science Teachers Association External link (NSTA) to recognize the outstanding efforts of teachers to implement an inquiry-based approach to science education that stimulates interest and exploration in students. The grant covers up to \$1,500 in travel expenses to attend the NSTA national conference, as well as \$1,500 for use in the classroom. You can explore any of the other numerous awards offered by NSTA .
- **Lemelson-MIT InvenTeams** External link Amount: up to \$10,000 Description: The Lemelson-MIT Program at the Massachusetts Institute of Technology recognizes the important achievements of inventors and has created the InvenTeams initiative, a grant program that focuses exclusively on STEM education. The InvenTeams program encourages hands-on engagement and the application of science, technology, education and mathematics concepts to the solving of real world problems. Teams of students and teachers apply for InvenTeams grant by finding a timely and relevant societal issue, and conceptualizing an technological invention that can help solve that problem. Up to 15 teams are chosen to receive grants that help fund the actual invention of their idea.

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.