

CONNECTICUT SCIENCE CONNECTION

SEPTEMBER 10, 2007 ISSUE

THE CONNECTICUT BUILDING A PRESENCE FOR SCIENCE NETWORK IS SUSTAINED THROUGH A GRANT FROM BRISTOL-MYERS SQUIBB AND THE ADVOCACY OF THE CONNECTICUT ACADEMY FOR EDUCATION

STATE COORDINATOR..DAVID LOPATH
LIST MODERATOR..ELOISE FARMER

LOPATH@CTACAD.ORG
ELOISE@CSSAONLINE.NET

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

CONGRATULATIONS!



HOUSATONIC VALLEY REGIONAL HIGH SCHOOL ENVIROTHON TEAM IS FIRST IN THE NATION,

beating 53 teams from 44 states and 9 provinces. Team members, 2007 graduates Andrew Alquesta of Canaan, Arlen Kleinsasser of Falls Village, Linnea Palmer Paton of Sharon, incoming seniors Sunny Kellner of Kent, and Jeremy Kleinsasser of Falls Village, each received a \$5000 scholarship. The contest consisted of field tests on soil, land use, aquatic ecology, forestry, and wildlife, involving a team-created presentation and questioning from judges on their design of an education facility using geothermal and solar energy. Their advisor is teacher David J. Moran.

Science NetLinks is a resource for science educators produced by the American Association for the Advancement of Science, the world's largest and most prestigious general science organization. It is the most thoroughly and simply indexed set of science lessons available, and it is completely free with hundreds of lessons, tools, web resources, and science updates. You can visit the web site at www.sciencenetlinks.com



Sun Angle Lab 2007/2008

Join 23 schools in the US participating in this year's Sun Angle Lab! That is the largest number ever! If you would like to participate, you must let them know by this Friday. Southern Hemisphere schools are always welcome!!!!

Please go to this.gatescience.info link for all the details.



FREE!! NEW OFFERING FROM PEABODY MUSEUM!

Especially for teachers grades 5-9! **2 day Biodiversity and Global Change Teachers Institute** ! Saturday., October 20 and Sunday October 21. This exciting professional development program helps teachers use innovative curricula and hands-on, inquiry-based learning methods

that link biodiversity with Connecticut's life and earth science standards in the Connecticut Science Grade Level Expectations. Our program emphasizes methodologies that improve critical science thinking including inquiry-and problem-based learning and science literacy and numeracy. Peabody Fellows teachers are able to engage their students in life and earth sciences, and prepare them to perform their best on the upcoming CAPT testing in Science. Most importantly, the program assists teachers to help students make the connection between the natural environment and their own lives. The Institute addresses many Connecticut Science Framework curriculum standards. To see the complete brochure, go to: www.cssaonline.net/Oct07brochure.pdf .



2007 BIOLOGY TEACHER OF THE YEAR AWARD EVENT! FRIDAY SEPTEMBER 14 AT MANCHESTER COMMUNITY COLLEGE CULINARY ARTS CENTER.

Refreshments will be served. Speaker: Dr. James Hughes of Trinity College, topic will be "Radical Visions of the Future as Inspirations for Studying Science and Technology" **Our congratulations** to the award recipient, Watertown High School Biology Teacher **Monica Perog Kreuzer**. The event is free and open to the public. Please come to honor an outstanding teacher. Flier can be seen at: www.cssaonline.net/bioteacheraward.pdf For more information, you can call Mary Ann Zabik at 860-832-2608 or e-mail zabikm@ccsu.edu



Want to go mushroom hunting, collect some minerals, learn about

spread-throwing or learn more about Connecticut Snakes. You can even do some basket-weaving! All of these programs and more are offered this fall at the **Connecticut Museum of Natural History**. Go to their web site for a complete calendar and description at:

<http://www.cac.uconn.edu/mnhc/urrentcalendar.html> or get an abbreviated description at: [mushroomforay.doc](http://www.cac.uconn.edu/mnhc/mushroomforay.doc)



CT Business and Industry Association, CT State Department of Education, CT State

Department of Higher Education, and CT Academy for Education in Mathematics, Science & Technology, along with the CT Science Center, are collaborators on an initiative resulting in a grant that will help fund a training and incentive programs for Advanced Placement (AP) and pre-AP courses and exams for the next six years. A major goal is to prepare students to excel in math, science and English and encourage them to explore science- and technology-based careers. NSMI funding comes from the Exxon Mobil Corporation, Bill and Melinda Gates

Foundation, and the Michael and Susan Dell Foundation.



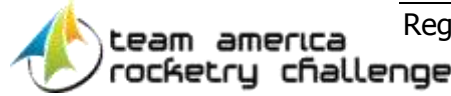
MARITIME AQUARIUM FUN!



Adventure Under the Sea Exhibit! Meet some of the real undersea animals (like sponges, crabs, and sea stars) that inspired the SpongeBob cartoon characters. **And then go on the SpongeBob SquarePants 4-D**

ride! See more of the wonderful offerings at:

<http://www.maritimeaquarium.org:80/> **Norwalk Aquarium is looking for volunteers.** For details and requirements, please click on: [employmentopportunities.htm](http://www.maritimeaquarium.org:80/employmentopportunities.htm)



Registration for the Team America Rocketry Challenge 2008, a national model rocket competition for U.S. students in

grades 7 through 12, opens on **Sept. 5, 2007**. Thousands of students compete each year in the Team America Rocketry Challenge, the world's largest model rocket contest. Cash prizes are awarded to the top finishers. Teams of three to 15 students design, build and fly a model rocket to carry two raw eggs for a precise flight duration of 45 seconds and to an exact altitude of 750 feet. The team whose rocket comes the closest to both, and brings the eggs back unbroken, wins. To be eligible for the national fly-off, teams must fly a qualifying flight observed by an adult member of the National Association of Rocketry. The top-scoring 100 teams in the country will be invited to participate in the final fly-off to be held in May 2008. Registration closes on Nov. 30, 2007, or when 750 teams have registered - - whichever comes first. For more information, visit <http://www.rocketcontest.org/>

Looking for Exemplary Science Programs (ESP) that Illustrate Inquiry:

NSTA National Advisory Board (NAB) invites your help in identifying 15 programs for the 2008 Exemplary Science Program Monograph. The sixth monograph in the series now requests nominations for recognizing teachers and schools. Inquiry has become a word that all respect and admire – almost religiously. Most teachers, textbook authors, curriculum developers, and the general public see it important and purport to use it. However, in actual practice it often has a word like guided, completed, or even “directed” used with it as an adjective. But could scientists be so restrained??

The 2008 ESP monograph will focus on teachers and programs which illustrate full (or open) inquiry. This means that it starts with student curiosities and questions followed by student attempts to deal with their own curriculum and attempt to provide answers. Of course the main ingredient for scientific inquiry is collecting evidence from others to evaluate and to establish validity to the ideas and solutions proposed. And, these must be shared and used to resolve the issues. All of this requires contexts (situations) to promote inquiry – which is the stated major goal for science education as indicated in the National Science Education Standards.

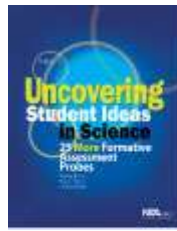
Specifically the goal called for producing students who “experience the richness and excitement of knowing about and understanding the natural world”. The NAB looks forward to reviewing nominations and working with at least 15 teacher teams who are involved with real inquiry on the part of students in their classrooms. Nominations should be forwarded to Robert E. Yager, Chair of NSTA's ESP efforts and editor of the ESP Monograph Series (Science Education Center, Room 450 VAN, The University of Iowa, Iowa City, Iowa 52242, robert-yager@uiowa.edu, 319-335-1189).



SOME OF THE EXCITING OFFERINGS THAT WILL BE PRESENTED AT THE ANNUAL SCIENCE

EDUCATORS CONFERENCE IN NEW BRITAIN ON OCTOBER 27 WILL INCLUDE: For Elementary Teachers: *Children's books and Science, Exploring Magnetism and Electricity, Eye See Light, and many more*, For Middle School, *Introduction to Green Chemistry, Prep: Mars Rover Activity, Antibiotics the Full Course, and many more*; High School: *More Connecticut Energy Education, Demonstrations: Five Minutes or Less, Bugs and Scrubs, and many more.* Next week I will list more of the engaging workshop offerings. Sign up early to get your first workshop choices by logging on at: <http://www.csta-us.org/event.htm?id=2azessfl>

Please Become A Member In A Professional Connecticut Science Organization And Get Involved. Join the Connecticut Science Teachers Association by going to <http://www.csta-us.org> and click on Membership. It costs only \$30.00 per year to receive 4 newsletters, 2 Journals, discounts at Conferences and workshops, and valuable information that will appear on CSTA's new web site. **For Teacher Leaders:** You need not be a Supervisor to join the **Connecticut Science Supervisors Association.** Not all school systems have science coordinators, but there are teachers who often take the leadership role in science education. CSSA would welcome your participation i. To join for \$20.00/year, print a form from: <http://www.cssaonline.net/CSSAmembershipform.html>



Find out what your students know about life, Earth, and space science.

Volume 2 of *Uncovering Student Ideas in Science* reveals the surprising misconceptions students bring to the classroom—allowing teachers to replace those ideas with a sound understanding of science.

[Click here for details](#)



HIGH-PERFORMANCE SCHOOLS IN CONNECTICUT: A Green Building Conference for School Building Stakeholders: Tuesday, September 25, 2007 9am-noon at Hill Regional Career High School, 140 Legion Avenue New Haven. **Cost:** CT Green Building Council Members (CT GBC) can attend at no cost. For non-members, the cost is \$50. The first 50 non-members who register will receive a \$30 scholarship from the CT GBC and only pay \$20. CT GBC Members may register by emailing Kim Trella at: kim.trella@po.state.ct.us Non-members should register at: www.acteva.com/go/ctgbcschools questions? Please make checks payable to: CT GBC, P.O. BOX 152 , Rocky Hill, CT 06067

In an attempt to keep the CSC at readable length, the following links will allow you to access offerings in Previous Issues (Return to Table of Contents)

<http://www.cssaonline.net/CSCAug21.pdf>
<http://www.cssaonline.net/CSCAug28.pdf>
<http://www.cssaonline.net/CSCSept4.pdf>



1st Annual State-wide Smart Growth Conference! 1st Annual State-wide Smart Growth Conference: Wednesday, November 14, 2007, Michel J. Adanti Student Center Southern Connecticut State University, New Haven, CT, 8:30 am - 4:00 p.m. Space is limited; please [register](#) to attend by Friday, September 28. <http://www.ctsmartgrowth.com/showDiary.do?diaryId=95> <http://1000friends-ct.org/PayPal-RegisterConference.htm>

Check Out the Fall Lineup for NSTA's Web Seminars: Topics for the Fall 2007 lineup of Web Seminars include human space flight, interesting science careers for students, teaching inquiry with food, engaging parents, the impact of the polar regions on Earth's climate system, nanoscale science, and the living systems of the Arctic and Antarctic.

- [NASA: Igniting the Flame of Knowledge: Human Space Flight](#) (October)
- [SRS: From Astrobiology to Zoology: Igniting Students' Interests in Science Careers](#) (October)
- [FDA: Teach Science Concepts and Inquiry with Food](#) (November)
- You may be interested in participating in a no-cost, interactive NSTA Web
- Seminar titled "Teaching Science Concepts and Inquiry Through Food". Hosted by scientists from the U.S. Food and Drug Administration, the live seminar will focus on food microbiology (Content Standard 7.4), as well as food-borne illnesses, dietary recommendations and food labels. Registration information is available at:
- http://learningcenter.nsta.org/products/symposia_seminars/fall07/FDA/webseminar.aspx
- [NASA: Inquiry in Science and Mathematics Education: Parents as Partners](#) (November)
- [IPY: The Role of Polar Regions in Earth's Changing Climate System](#) (November)
- [NSTA Press: Nanoscale Science: Activities for Grades 6-12](#) (December)
- [IPY: Arctic and Antarctic Living Systems](#) (December)

NORWALK MARITIME CENTER: New IMAX on the Alps! For more information, please go to: www.maritimeaquarium.org/about_press.html The Maritime Aquarium receives support from the State of Connecticut Commission on Culture and Tourism. <http://www.maritimeaquarium.org/>



FROM THE BOSTON MUSEUM OF SCIENCE: CSI: The Experience, our new special exhibit based on the hit television series. Free viewings beginning at 3:00 p.m.; last entry is 6:00 p.m. [Educators Open House | CSI: The Experience | Register Now](#)

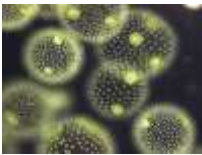
THIS MESSAGE FROM THE UNIVERSITY OF ARIZONA:

My name is Tim Slater and I am an astronomy education professor at the University of Arizona. Our team is trying to determine how teachers are using Earth and Space science images, data, and web sites in teaching. The overarching goal of the project is to figure out what things scientists can do to best support teachers. If you are a classroom teacher, we would really, REALLY appreciate you completing a very short (5 minutes maximum), online survey. The survey is completely anonymous - your responses are never associated with your name and will ask you questions about which, if any, resources you use. SURVEY LOCATION: http://www.surveymonkey.com/s.aspx?sm=kAXxqYhJa_2bnImRhgNT4SMg_3d_3d http://www.surveymonkey.com/s.aspx?sm=kAXxqYhJa_2bnImRhgNT4SMg_3d_3d If you need additional information, please contact us via email tslater@as.arizona.edu

AGI ANNOUNCES CONTEST THEMES FOR EARTH SCIENCE WEEK 2007: Contact: Geoff Camphire gac@agiweb.org Alexandria, VA - The American Geological Institute (AGI) is sponsoring three national contests in conjunction with Earth Science Week 2007, October 14-20 - "The Pulse of Earth Science." All U.S. residents are encouraged to enter "People Discovering Earth's Treasures" - this year's Earth Science Week photography contest. Submissions should depict an aspect of earth science as it appears in your community. Learn to look at your surroundings through a geoscientist's eyes and photograph what you discover.

Students in grades K - 5 are eligible to enter the visual arts contest, "Changing Earth." Submissions should illustrate how geologic processes are constantly changing Earth's landscape. Draw a picture, make a collage, or create another piece of two-dimensional artwork that highlights the continuous change on our planet.

The essay contest "Earth Science in My Community" is open to students in grades 6-9. Entries should be short essays of no more than 300 words explaining a unique geologic aspect of their community, discuss current earth science research in their geographic area, or indicate why it is important to study the geology of your town. For more information on these contests including information on how to enter, please go to <http://www.earthsciweek.org/>.



ATTENTION BIOLOGY AND LIFE SCIENCE TEACHERS!! A wonderful web site with images and activities to use in the classroom to enhance student experiences with the very, very small.

http://www.exploratorium.edu/imaging_station/activities/classroom/classroom.php

We are proud to announce that we have another author in our midst! Point of Contact Bill Peltz has written a book entitled: Dear Teacher: Expert Advice for Effective Study Skills. In the book he tells the teacher how to help the student learn how to learn: how to take notes and organize a notebook, how to annotate a text, how to learn material for tests. Those of you fortunate enough to have attended some of the many workshops Bill has presented for CSTA over the years will know what that Bill is a valuable resource. Congratulations! You can find his book at Amazon.com

57 WORKSHOPS!
EXHIBITORS WITH LOTS OF STUFF AND INFORMATION!
HUNDREDS OF FELLOW TEACHERS OF SCIENCE!
(AND MUMMIES!)



The 2007 Connecticut Science Educators' Conference Program is here! [Click here](#) for more information. This year you may register for the conference online. You may also pay your membership dues online. You can even register and pay dues at the same time! Follow the directions from the homepage for membership, or save a step and do both at once with your conference registration. To register, go to: <http://www.csta-us.org/>



Nanotech Symposium for Educators and Journalists: Join us for a lively journey into the mysterious world of the very small, and take part in provocative discussions concerning nanotech's very big potential impacts. This is a day of continuing education and enrichment with top researchers and experts skilled at communicating science and technology to lay audiences. Multiple break-out sessions are targeted to the varying needs of educators and journalists. Topics include *Nano 101*, *Nanotech and Society*, *Visualizing the Nano World*, *Teaching Nano*, *Nanomedicine*, *Nano and Consumer Health and Safety*, and *Covering the Nano Beat*.

Audience: Middle/High School Educators and Journalists. Available: Friday, October 26, 9:00 a.m. – 4:00 p.m. Registration required: 617-723-2500. Fee: \$25, includes parking, lunch, PEP certificate, and Exhibit Halls admission (open to 9:00 p.m. on Fridays). For updated information: mos.org/educators. Co-sponsored by the Center for High-Rate Nanomanufacturing at Northeastern University, the University of Massachusetts Lowell, and the University of New Hampshire and by the Nanoscale Science and Engineering Center at Harvard and MIT.

2007-2008 JWOD/JETS NATIONAL ENGINEERING DESIGN CHALLENGE: The JWOD/JETS National Engineering Design Challenge (NEDC) is a competition in which teams of students learn and apply engineering skills while making a difference in the lives of persons with disabilities. More details are at www.jets.org.

Greater Hartford Academy of Math and Science (GHAMAS) will be holding its annual professional development conference for middle/high school math and science teachers on Tuesday, Nov 6, 2007. Currently, GHAMAS is looking for presenters that would like to present a two hour session in math or science. If you are interested, please email Rachael Manzer rmanzer@crec.org

The **UConn Material Advantage (UCMA)** society is made up of engineering students from several disciplines interested in sparking scientific inspiration in kids in CT schools. Each year they develop a Materials Quiz that focuses on the achievements of Connecticut scientists and engineers at CT companies and send it out to teachers. They are also offering teachers the opportunity to have them come into their classrooms and do presentations or help with longer experiments as well. Details can be found at: <http://www.cssaonline.net/UCMAQuiz&CL2007.doc>

Take Action: Tell Congress to Support Including Environmental Education in NCLB
http://www.democracyinaction.org/dia/organizationsORG/cel/campaign.jsp?campaign_KEY=7147

Looking for a Science Position? Check out openings at: www.cssaonline.net/employmentopportunities.htm

THE FOLLOWING MATERIAL COMES FROM THE STATE DEPARTMENT OF EDUCATION AND IS INTENDED TO ASSIST EDUCATORS IN IMPLEMENTING THE FRAMEWORKS:

STUDENT OPPORTUNITIES! FROM MARY ANNE BUTLER, CT STATE DEPARTMENT OF EDUCATION: The People Speak is sponsoring a series of Global Debates for high school students. During ten day periods in October 2007 and March 2008, students across the globe will be organizing public debates in their high schools and coordinating a global vote on the debate topics. October's debate topic is on the best way to lower carbon emissions and March will focus on water rights – both serious issues facing the US and the world. Information on the debates can be found at: www.thepeoplespeak.org Victoria Baxter, Director of The People Speak (vbaxter@unfoundation.org).





NASA OPPORTUNITIES: To find out all of the opportunities offered by NASA for Educators and their students, go to this link: <http://www.nasa.gov/audience/foreducators/topnav/actnow/> . For the most recent offerings, go to: www.cssaonline.net/NASAnews.doc



Opportunity for Science Educators Doing Environmental Work: [The SeaWorld/Busch Gardens/Fujifilm Environmental Excellence Awards](#) provides school and community groups with a monetary award, national recognition, and some well-deserved fun at one of the adventure parks. Eight winning groups are selected each year to win \$10,000. One environmental educator/leader each year receives \$5,000. The deadline for applications is November 30, 2007. For information visit the link above or call toll-free (877) 792-4332.

Bioethics Curriculum Seeking High School Biology Field Test Teachers for Spring Semester 2008:

Funded by the National Institutes of Health, the Center for Applied Ethics and the Center for Science Education at Education Development Center are collaborating on the development of a bioethics curriculum that can serve as a supplement to high school biology classes. . **Application Deadline: September 30, 2007** . For Additional Information Contact: Erica Jablonski, M.A., Center for Science Education, Education Development Center, ejablonski@edc.org or 617-618-2552

STUDENT OPPORTUNITIES!

NASA'S ENGINEERING DESIGN CHALLENGE: PLANT GROWTH CHAMBERS: During the 2007-2008 school year, join NASA's Engineering Design Challenge to design, analyze, build, and assess plant growth chambers as part of a standards-based activity related to the STS-118 space shuttle mission. [Click here](#) for more information and to register. www.nasa.gov/education.

In support of **Earth Science Week 2007 (October 14-20)**, the American Geological Institute (AGI) is publishing its "The Pulse of Earth Science" Toolkit . **The Toolkit can be pre-ordered now. Shipping will begin in early August.** Individual kits are available for the cost of shipping and handling (\$6.95 in the United States). Bulk pricing is available. Visit <http://www.earthsciweek.org/materials/index.html>

We are presently funded by Bristol-Myers Squibb
<http://www.bms.com/landing/data/index.html> MANY THANKS TO OUR SPONSOR