

E-Blast # 1 March 2010

### National Survey on STEM Education

This survey is designed to help STEM education publishers, science technology companies, and professional development service providers develop a better understanding of the challenges and needs of STEM educators and educational leaders. You are invited to participate in this survey because you are a leader in STEM education in your district or school. The survey should take you approximately ten minutes to complete.

You'll be asked questions about:

- Challenges facing STEM education in the U.S.
- Funding for STEM education and your funding priorities
- Technology for STEM education
- Professional development for STEM education

You may reach the survey by clicking on the link below.

[http://www.surveymonkey.com/s/STEM\\_Research](http://www.surveymonkey.com/s/STEM_Research)

Information on the following items can be found on the LSTA website [www.lsta.info](http://www.lsta.info)

1. The 5<sup>th</sup> Annual Globe at Night Campaign: 3-16 March 2010
2. PBS Teachers Innovation Awards For K12 Educators; Deadline March 12, 2010
3. Sally Ride Science Festival March 13, 2010 at Tulane
4. The ASHG 5th Annual DNA Day Essay Contest; Deadline March 15, 2010
5. K-12: Celebrate National Wildlife Week! March 15-20, 2010
6. More Rocks in Your Head Workshop; Deadline to register March 15, 2010
7. K-12: Sun-Earth Day Is March 20
8. Gr 5-9: DOE Academies Creating Teacher Scientists (ACTS)
9. Kids Who Bird is a club sponsored by the Baton Rouge Audubon Society
10. High School Chemistry Grants from the American Chemical Society; Deadline April 1, 2010
11. Spring schedule for NASA's Digital Learning Network
12. The Historic New Orleans Collection Wetlands Project and Family Day information
13. Medtronic Foundation Science Matters FREE 16-page family science guide

1. The 5<sup>th</sup> Annual Globe at Night Campaign: 3-16 March 2010

What: The Globe at Night Campaign

When: 8pm to 10pm local time, March 3-16, 2010

Where: Everywhere

Who: You! (Everyone!)

How: See <http://www.globeatnight.org>

Why: With half of the world's population now living in cities, many urban dwellers have never experienced the wonderment of pristinely dark skies and maybe never will. This loss, caused by light pollution, is a concern on many fronts: safety, energy conservation, cost, health and effects on wildlife, as well as our ability to view the stars. Even though light pollution is a serious and growing global concern, it is one of the easiest environmental problems you can address on local levels.

Globe at Night is an annual 2-week campaign in March that helps to address the light pollution issue locally as well as globally. This year the campaign is March 3-16, 2010. You are invited along with everyone all over the world to record the brightness of your night sky by matching its appearance toward the constellation Orion with star maps of progressively fainter stars found at [http://www.globeatnight.org/observe\\_magnitude.html](http://www.globeatnight.org/observe_magnitude.html). You then submit your measurements on-line at <http://www.globeatnight.org/report.html> with your date, time and location. A few weeks later, organizers release a map of light-pollution levels worldwide. Over the last four 2-week Globe at Night campaigns, volunteers from over 100 nations have contributed 35,000 measurements.

To learn the five easy steps to participate in the Globe at Night program, see the Globe at Night website at <http://www.globeatnight.org>. You can listen to our 10-minute audio podcast on light pollution and Globe at Night at <http://365daysofastronomy.org/2010/02/03/february-3rd-the-globe-at-night-campaign-our-light-or-starlight/>

For activities that have children explore what light pollution is, what its effects are on wildlife and how to prepare for participating in the Globe at Night campaign, see the new activities at <http://www.darkskiesawareness.org/DarkSkiesRangers>.

Monitoring our environment will allow us as citizen-scientists to identify and preserve the dark sky oases in cities and locate areas where light pollution is increasing. All it takes is a few minutes during the March 2010 campaign to measure sky brightness and contribute those observations on-line. Help us exceed the 15,000 observations contributed last year. Your measurements will make a world of difference.

## 2. PBS Teachers Innovation Awards For K12 Educators

To honor and celebrate educators that engage students at new levels, spark their curiosity, and tap into students' natural instinct to explore, PBS and its local stations have launched the PBS Teachers Innovation Awards. PreK–12 educators can enter now for a chance to win a behind-the-scenes trip to the premier annual PBS event and other prizes. For more information on how to enter, visit [www.pbs.org/teachers/innovators](http://www.pbs.org/teachers/innovators). The deadline to enter is March 12, 2010.

## 3. Sally Ride Science Festival March 13<sup>th</sup> at Tulane University

On March 13, Southeast Louisiana girls will be inspired to explore the exciting world of science at the Sally Ride Science Festival at Tulane University in New Orleans, Louisiana. The festival, presented by [Northrop Grumman](#) and [Sally Ride Science](#), is open to the public and runs from 11:00 a.m. to 4:15 p.m.

The Sally Ride Science Festival, hosted by the The Tulane School of Science and Engineering at Tulane University, will bring together hundreds of upper elementary and middle school girls, parents and teachers for a day of science and socializing. The festival features discovery workshops for students given by local scientists and engineers, as well as workshops for parents and teachers on ways to support students' interests in science and math. A highlight of the festival will be an inspiring talk by astronaut Sandra Magnus, a veteran astronaut who has spent over 4.5 months in space aboard the International Space Station. The festival also includes lunch and a street fair with hands-on activities, booths, and music.

The keynote speaker will be astronaut Sandra Magnus who will share stories from the four-and-a-half months she spent aboard the International Space Station.

A \$20 advanced registration fee includes the featured talk, workshops, lunch and the street fair. Advance registration is required. For more information go to [www.SallyRideScience.com](http://www.SallyRideScience.com) or call 1-800-561-5161. Information is posted on the LSTA website: [http://lsta.info/posting/SRSFestTulane2010\\_2sided.pdf](http://lsta.info/posting/SRSFestTulane2010_2sided.pdf)

#### 4. The ASHG 5th Annual DNA Day Essay Contest

DNA Day is just around the corner and the deadline for the essay contest is in three weeks: March 15, 2010 (Mon) at 5:00 PM EST. To submit your students' essays, please visit <http://www.ashg.org/education/dnaday.shtml> and click on '5th Annual DNA Day Essay Contest' for the submission link, rules, and more information.

2010 DNA Day Essay questions:

Option 1: Scientists can now determine the complete DNA sequences of organisms, including humans. Now that this milestone has been reached, is there a reason to continue learning about Mendel, alleles, and inheritance patterns? Explain your answer.

Option 2: Genetic testing allows geneticists to determine an individual's DNA sequence, and research has identified a number of genes, such as HMGA2 and GDF5, that are associated with height. Will such associations allow scientists and physicians to predict a person's final adult height from infancy? Explain your answer.

Questions? Please email [Angie Wong](mailto:Angie.Wong@lsta.info).

#### 5. K-12: Celebrate National Wildlife Week!

<http://www.nwf.org/Get-Outside/Be-Out-There/Events/National-Wildlife-Week/At-School.aspx>

March 15-21, 2010: Theme = Get Wild, Child!

Celebrate National Wildlife Week by doing what comes naturally. Whatever you do—at home, school or play—do it outdoors and have fun! Climb trees, chase butterflies, dig in the dirt and celebrate nature. You'll become healthier, happier and more connected to the world around you.

Receive a custom Educator Activity Guide featuring a week's worth of local animals and plants to watch for, tree planting ideas, and ideas to make your school environmentally friendly. Learn how outdoor time enhances student readiness and performance, download nature-themed activities and lessons, and green your school (including its curriculum) with Eco-Schools USA.

Complete a short survey at the following web site to receive your free Activity Guide:

<https://www.surveymonkey.com/s/BTJV2KM>

#### 6. More Rocks in Your Head Workshop: One of the wonderful benefits Louisiana teachers enjoy are the outstanding opportunities offered when the professional associations and organizations from the business community come to New Orleans.

The American Association of Petroleum Geologists will be holding their annual conference in New Orleans this April. The planners were attentive to the school calendar during their visit and they placed a one day workshop for teachers on the weekend before their actual event to avoid any conflict with state

wide testing. Teacher may register to attend the one day workshop either Saturday April 10<sup>th</sup> or Sunday April 11<sup>th</sup>. The deadline to register is March 15<sup>th</sup>.

The materials that will be distributed to teachers who attend either the Saturday or Sunday session are worth several hundred dollars. A continental breakfast and lunch will be provided. At this time the planners are working to arrange complimentary parking.

Our business partners will continue to offer programs for teachers and students if they feel their efforts are welcomed and appreciated.

Visit the LSTA website for registration information and program flyer.  
[http://lsta.info/posting/aapg\\_mriyh\\_LESTA\\_shell\\_newREG\\_loc.pdf](http://lsta.info/posting/aapg_mriyh_LESTA_shell_newREG_loc.pdf)

#### 7. K-12: Sun-Earth Day Is March 20

<http://sunearthday.gsfc.nasa.gov/2010/about/index.php>

Sun-Earth Day, sponsored annually by the National Aeronautics and Space Administration (NASA), focuses on one celestial event. The theme for this year's Sun-Earth Day, March 20, is magnetic storms, the most violent explosions in the solar system.

On its web site, the Sun-Earth Day team offers web casts, multimedia products, and print resources for K-12 school and informal educators. Included are downloadable bookmarks, flyers, a fact sheet on magnetism, audio and video podcasts, and real-time images of the sun. Also on the site are online children's books about the sun.

Lesson plans for K-5 classrooms introduce auroras, magnetism, space math, and features of the sun. Web sites of past themes—space weather, solar eclipses, the sun's atmosphere, and more—can be accessed from the current Sun-Earth Day home page.

On March 20, the NASA team will broadcast a webcast from the exhibit floor of the National Science Teachers Association conference in Philadelphia, Pennsylvania. Scientists, teachers and students will demonstrate the power of magnetism.

Learn more about Sun-Earth Day resources by registering to receive updates.

#### 8. Gr 5-9: DOE Academies Creating Teacher Scientists (ACTS) <http://ed.fnal.gov/acts>

Fermilab is offering a limited number of positions for teachers of grades 5-9 in its DOE ACTS cohort starting in the summer of 2010. Participants will meet at Fermilab for four weeks each summer for three years. During the academic year following each summer, as participants implement their summer work in their schools and work on small projects, they will be supported by program staff and by each other, primarily through online meetings, with one or two face-to-face meetings as well.

Participants will receive an \$800/week stipend for their summer work. Non-local participants will also receive housing and travel. All participants will be eligible for grants to support classroom equipment purchases and travel to professional development conferences.

9. Kids Who Bird is a club sponsored by the Baton Rouge Audubon Society. This club designed for kids aged 9-16 who are interested and excited about birds. They will learn about the birds you can find right here in Baton Rouge, as well as other places in Louisiana.

Binoculars and field guides are available for those who want to borrow them; they are essential tools for this activity! In addition to learning to identify birds by sight, we'll spend a lot of time listening to the birds and learning to identify them by the sounds they make. Each member will keep a "life list" of all the birds they identify (by sight or sound!) when we go out on our field trips around Baton Rouge and other places in Louisiana.

The club is currently scheduled to meet on the third Wednesday of the month in the Museum of Natural Science on the LSU Baton Rouge campus. The meetings focus on bird education, with lots of hands-on and interactive activities. In addition to "classroom" work we'll also try to hold a field trip at least once a month so we can get out and find the birds! Many of our field trips will be at the best Baton Rouge area birding places, but occasionally we will go farther afield to pursue more specialized species, as we want to find and see a variety of birds. Parents are welcome to stay and learn about birds too!

Please check the Baton Rouge Audubon website for more information (under "Education") and the KidsWhoBird.org website for information about current activities. Contact Jane Patterson, Education Chair with the Baton Rouge Audubon Society for more information at [Education@braudubon.org](mailto:Education@braudubon.org) or 225-278-0067. Kids Who Bird is a club sponsored by the Baton Rouge Audubon Society. This club designed for kids aged 9-16 who are interested and excited about birds. They will learn about the birds you can find right here in Baton Rouge, as well as other places in Louisiana.

#### 10. High School Chemistry Grants from the American Chemical Society

The ACS-Hach High School Chemistry Grant is a great opportunity for chemistry educators to request up to \$1,500 for any purpose that enhances the teaching and learning of chemistry within their classrooms (i.e., professional development courses, laboratory supplies, instructional materials, and technology tools). They are currently accepting applications through April 1, 2010 for the 2010-2011 academic year. Details about the grant and the application process can be found at:

<http://www.acs.org/hach>

11. NASA's Digital Learning Network presents a series of webcasts to assist educators in staying current on NASA education resources and related products.

During each event, product producers, authors and experts will demonstrate their materials designed to optimize awareness and understanding of science concepts. Instructional objectives, accessing the materials and primary contacts for the materials will also be discussed. During the webcasts, participants will be able to submit questions to the presenter that will be addressed during the presentation.

In the coming months, the following topics will be covered:

-- **Robotics Course:** March 31, 2010, 4-5 p.m. EDT

-- **MoonWorld:** April 28, 2010, 4-5 p.m. EDT

-- **On the Moon:** May 26, 2010, 4-5 p.m. EDT

For more information about these webcasts, visit <http://dln.nasa.gov/dln/content/webcast/>.

Questions about these events should be directed to Caryn Long at [caryn.long@nasa.gov](mailto:caryn.long@nasa.gov).

12. The Historic New Orleans Collection: Not familiar with The Historic New Orleans Collection (THNOC) ([www.hnoc.org](http://www.hnoc.org)) please do yourself and your family a favor by checking out the website. On your next city visit use some time to visit at least one of the buildings and perhaps say hello to Sue Laudeman the Curator of Education.

Make plans for Family Day Sunday, May 17<sup>th</sup>. This is an annual FREE event offering activities for all ages. Held from 12:30 – 4 PM the Treme Brass Band will provide the music for dancing and entertainment.

Using this link [http://www.hnoc.org/publications/pdf/HNOC\\_Q1\\_10.pdf](http://www.hnoc.org/publications/pdf/HNOC_Q1_10.pdf) you will be taken to the Quarterly journal of THNOC, where on page 9 you will find an article on a current outreach project involving students from Lafourche and Terrebonne parishes.

13. Science Matters is a free 16-page family science guide sponsored by the Medtronic Foundation designed as a complement to science exploration. Geared primarily for 4<sup>th</sup> through 6<sup>th</sup> grade students, Science Matters is packed with activities, ideas, and technology profiles that help unlock the world of science and discovery at home and school. The publication is a tool for parents, caregivers, and teachers to work directly with young learners at home, at school, and in the community. Science Matters provides a range of interactive explorations and activities (from beginners to advanced) associated with the three primary areas of science development: science as inquiry, science as invention, and science and community. Teachers and youth leaders may request up to 50 copies while supplies last. Learn more about and request copies of the publication for your classroom <http://www.medtronic.com/foundation/community-ed-science-matters.html> or [download](#) an electronic version of Science Matters.