

E-Blast # 2 August 2010

Have you submitted your proposal to present at this year's LSTA science institute? The link to take you to the online submission site is provided below. Charlotte Bihm and Brenda Nixon the Program Co-Chairs are waiting to hear from you,

Links to the LSTA Awards page and travel grant application are below. We understand some teachers do not like to self nominate. However, each of you should consider doing exactly that or taking a moment to seek out a colleague you believe is a winner in their category...Rising Star, Outstanding Elementary, Middle or High School Science teacher. Awards Chair Jan Graff hopes to hear from you soon.

To submit a session proposal  
<http://www.cain.lsu.edu/LSTA2010>

Award information and applications  
<http://www.lsta.info/awards.shtml>

Travel Grant information and application  
[http://www.lsta.info/awards/2010\\_awards/2010\\_LSTA\\_travel\\_grant\\_application.pdf](http://www.lsta.info/awards/2010_awards/2010_LSTA_travel_grant_application.pdf)

LSTA School Chemical Cleanup workshops.  
Saturday August 28<sup>th</sup>: Mandeville; Contact Jan Mistich  
[Janiece.Mistich@stpsb.org](mailto:Janiece.Mistich@stpsb.org)  
Saturday September 11<sup>th</sup>: Region 7; Contact Sue Ottesen  
[sue.ottesen@bossierschools.org](mailto:sue.ottesen@bossierschools.org)

Jimmy Buffet at the free concert on the Gulf coast:  
<http://www.cmt.com/videos/misc/536045/when-the-coast-is-clear.ihtml>

For information on the following items please visit the LSTA website at:  
<http://www.lsta.info>

1. E-CYBERMISSION Middle School
2. NASA Explorer Schools Website for Middle and High School
3. NASA's Math and Science @ Work project
4. CellCraft Video Game for Middle School Students
5. Cassini Scientist for a Day (deadline October 27<sup>th</sup>)
6. Office Depot Foundation Grants (Deadline: November 15<sup>th</sup>)
7. Texas Instruments StudentZone
8. CLIMATE CHANGE WEBINARS FOR TEACHERS (Next Webinar Sept. 22)
9. "KNOW YOUR EARTH" TAKES NASA TO THE MOVIES

1. U.S. ARMY'S ECYBERMISSION PROGRAM AWARDS \$800,000+ TO 96 STUDENT TEAMS

In an effort to promote science, technology, engineering, and mathematics (STEM) education, the U.S. Army has named the 2009-2010 eCYBERMISSION 96 regional winning teams. eCYBERMISSION is a free, web-based, STEM competition for students in grades six through nine. The eCYBERMISSION competition encourages and rewards students from a diverse range of proficiency levels, interests, and backgrounds. The program allows students to compete for regional and national awards while working through the scientific method to solve problems in their communities.

The program selects teams with the two highest scores in each grade and region as the first-place and second-place regional winning teams. eCYBERMISSION also awards a team in each grade and region in four criteria award categories. These categories include: Application of Science, Math, and Technology; Innovation, Originality & Creativity; Benefit to the Community; and Team Collaboration and Communication. For more information, visit [www.ecybermission.com](http://www.ecybermission.com).

The eCYBERMISSION program awarded more than \$800,000 to students from across the nation and in Department of Defense Education Activity schools overseas.

2. The NASA Explorer Schools project is NASA's classroom-based gateway for middle school (grades 4-8) and high school (grades 9-12) classrooms. NES provides free teaching and learning resources that promote student engagement in science, technology, engineering and mathematics, or STEM. The project provides opportunities for teachers and students to participate in NASA's mission of research and discovery through inquiry-based experiences directly related to the work of NASA scientists and engineers.

Throughout the school year, the NES Virtual Campus website will serve as a portal to dynamic learning experiences, allowing students to examine real-world problems and challenges based on NASA research and exploration. Classroom activities are coupled with special events featuring interactions with NASA's scientific and technical workforce, so students learn firsthand about mission highlights, new technologies and research findings.

Teachers have the opportunity to participate in professional development experiences delivered through NES Virtual Campus technology to support effective classroom implementation of NES resources.

At the end of the year, NES will recognize its best teachers and schools with NASA experiences such as field center training, research opportunities and flights aboard a reduced-gravity aircraft.

All participants must be U.S. citizens. Each must be an administrator, aide, curriculum specialist, educator, guidance counselor, media specialist, resource teacher or student teacher in a state- or nationally accredited K-12 education institution in the United States or a U.S territory.

For more information and to schedule an orientation session, visit <http://www.nasa.gov/offices/education/programs/national/nes2/home/index.html>.

Questions about the new NASA Explorer Schools project should be directed to [nasa-explorer-schools@mail.nasa.gov](mailto:nasa-explorer-schools@mail.nasa.gov)

### 3. New NASA Website NASA's Math and Science @ Work

Advanced students require challenging materials to keep them focused on their studies and to help provide them insight into the limitless array of options in science, technology, engineering and mathematics, or STEM, fields.

NASA's Math and Science @ Work project offers challenging supplemental problems based on space exploration topics. This project engages students by providing real-world applications to promote critical thinking and problem-solving while exposing students to careers in space exploration.

These problems are for high school students in advanced classes, grades 10-12, and are formatted in a free-response style. Problems are available for calculus, physics, biology, chemistry, U.S. history and human geography.

Visit the Math and Science @ Work website at [www.nasa.gov/education/mathandscience](http://www.nasa.gov/education/mathandscience).

Questions about the Math and Science @ Work website should be e-mailed to Natalee Lloyd at [natalee.d.lloyd@nasa.gov](mailto:natalee.d.lloyd@nasa.gov).

### 4. CellCraft VIDEO GAME TEACHES MICROBIOLOGY EARNS TOP REVIEWS

A team of scientists, middle-schoolers, and software developers have partnered with Wake Forest University to create an educational video game that has gone toe-to-toe with some of the best shoot-'em-up games out there. In the game, players start out by learning the parts of a cell and how they work; it's a crash course in cell science in the first few minutes of the game. Then the action comes in: You must save your cell from freezing to death, being invaded by viruses, or even being digested by a giant crocodile. You can do this, but only with a strong understanding of how a cell works.

CellCraft has a unique appeal rarely found in today's "edutainment" titles. CellCraft integrates the intended teaching points within the rules of the game so that the "fun part" is the lesson. For example, to salvage precious cellular resources, players must learn that lysosomes are required to recycle aging mitochondria and chloroplasts. Students testing the game said they had more fun learning while trying to save a starving cell that is under heavy viral attack.

The game is available for free download at [www.cellcraftgame.com](http://www.cellcraftgame.com). For the school year, it will include a free, downloadable teacher's packet and a printable lab worksheet.

5. The Cassini Scientist for a Day contest challenges students to become NASA scientists studying Saturn. Participants examine three possible observations taken by Cassini and choose the one they think will yield the best scientific results. This choice must then be supported in a 500-word essay. Teaming up is encouraged. Winners will participate in a teleconference with Cassini scientists.

The contest is open to all students in the United States from grades 5-12, working alone or in groups of up to four students. The essays will be divided into three groups: grades 5-6, 7-8 and 9-12. All submissions must be students' original work. Each student can submit only one entry.

Deadline for Fall 2010 submissions is noon Pacific time (3 p.m. EDT) on Oct. 27, 2010.

For more information, visit <http://saturn.jpl.nasa.gov/scientistforaday/>. If you have questions about this contest, please e-mail your inquiries to [scientistforaday@jpl.nasa.gov](mailto:scientistforaday@jpl.nasa.gov).

#### 6. Office Depot Foundation Grants (Deadline: November 15)

The Foundation's funding focus includes: Making a Difference in Children's Lives - to support activities that serve, teach and inspire children, youth and families; Building Communities - to support civic organizations and activities that serve the needs of our community; and Disaster Relief - to support disaster relief efforts of recognized national, regional and local agencies, and to provide disaster relief to Office Depot associates who have experienced catastrophic loss. An online eligibility survey and grant application can be found on the Grant Making Guidelines page. Applications are retrieved on a monthly basis and are reviewed by a committee. Please allow at least 12 weeks after you submit your completed application before you receive a response. Grant amounts will be a minimum of \$50 and a maximum of \$3,000 (very limited). The majority of grants issued are in the vicinity of \$1,000 and are supported by in-kind donations when inventory allows. The Office Depot Foundation will accept applications for the current funding cycle through November 15, 2010. Learn more at: [www.officedepotfoundation.com/funding.asp](http://www.officedepotfoundation.com/funding.asp)

7. Texas Instruments (TI) and the Sloan Career Cornerstone Center are teaming up to promote planning for careers in science, technology, engineering, mathematics, and medicine, collectively known as STEMM. Through [TI's Student Zone](#) and the [Sloan Career Cornerstone Center](#) (SCCC), students, parents, teachers, and counselors have access to free, in-depth resources to help guide middle and high school students in making decisions concerning their immediate math and science education. These tools also help them understand how these decisions could impact their future careers. TI provides the learning tools and resources that enable teachers to more effectively teach critical math and science concepts and to make subjects more accessible to all students. The Sloan Career Cornerstone Center offers comprehensive preparation tips, salary data, job hunting ideas, personal interviews with hundreds of people who offer candid insight into their own diverse careers, and updated lists of summer camps,

national programs and projects, and scholarship opportunities for middle and high school students.

8. CLIMATE CHANGE WEBINARS FOR TEACHERS (Next Webinar Sept. 22)  
Join Windows to the Universe educators this fall for free 90-minute live seminars highlighting science content and classroom activities on topics related to climate change. Offered through the National Science Teachers Association, these seminars are a part of the NASA-funded Global Climate Change Educator Professional Development Network. Upcoming seminars:

- Sept. 22 – An Introduction to Earth’s Climate
- Sept. 28 – Clues to Climates of the Past
- Oct. 6 – Global Climate Change and the Earth System
- Oct. 14 – Effects of Climate Change: Oceans and Ice
- Oct. 20 – Effects of Climate Change to Life on Earth
- Oct. 28 – Predicting Future Climate and Considering Solutions

All Webinars start at 6:30 P.M. EDT. For more information, registration and other climate change education resources associated with the project, please visit:

[http://www.windows2universe.org/teacher\\_resources/main/gcceptdn\\_main.html](http://www.windows2universe.org/teacher_resources/main/gcceptdn_main.html)

#### 9. “KNOW YOUR EARTH” TAKES NASA TO THE MOVIES

The “Know Your Earth” project is a venture between NASA’s Earth-Observing missions and National CineMedia. NASA has released two short videos that are playing on television screens in almost 300 movie theater lobbies across 41 states. The videos, which have been playing throughout the month of July, emphasize that while NASA’s well known for space exploration, it also studies our home planet.

The first video, “Know Your Earth,” shares a series of fascinating facts about how climate change affects oceans, land, the atmosphere, and ice sheets around the world. The three-minute video explains how NASA’s Earth observing satellite fleet helps scientists gather accurate data to understand those changes. The animated video features a clip-art style astronaut who jumps in the ocean, flies in a helicopter, and generally gets up close and personal to the action.

The second video, called “NASA Reveals a Most Unusual Planet,” runs 30 seconds and uses dramatic, high-tech space animations to show that NASA has uncovered the most unusual planet in the known universe - Earth.

A website - <http://www.nasa.gov/topics/earth/features/KnowYourEarth.html> - features links to free downloadable versions of the videos for use in classrooms, science centers, and by the general public. It also includes information on each of the satellite missions involved in the project and how each makes a significant scientific contribution in our understanding climate change.