



Greetings!

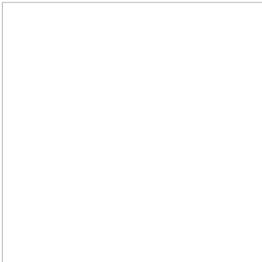
The school year is almost over and we're just as excited as you for summer! It's been a great year! If you haven't already done so, please take a moment to answer [some questions](#) about what you would like to see in the CEO newsletters next year. Then check out some of the great activities and professional development opportunities happening this summer.

Enjoy,
The Center for Educational Outreach

Opportunities and Events for Students

ASPIRE Mentoring Program

Deadline to Apply: June 7th



ASPIRE is a partnership between the JHU Applied Physics Lab (APL) and local schools. The APL High School Mentoring Program places qualified students recommended by their teachers into one-on-one mentoring relationships with APL engineers and scientists to complete research projects. During the academic year, students receive credits toward graduation: 1-2 credits for the successful completion of a required number of hours (5 to 10 hours a week). Students must demonstrate self-learning and are treated essentially like employees. Students must provide their own transportation to our campus in Laurel, MD and arrange their work hours according to the mentor's schedule. The project itself will focus on something that the mentor is already doing here at APL that engages the interests of the student - very flexible, but we do not support job shadowing or senior projects. Students keep journals of their work, which is monitored and evaluated by teachers. The experience culminates with a research abstract and presentation. Students are recommended by their teachers/counselors and must demonstrate professionalism, high academic achievement, and a strong desire to work on projects in APL departments. Detailed information about our program can be found on our [website](#).



Who We Are

The Center for Educational Outreach is part of the Whiting School of Engineering at Johns Hopkins University. Our mission is to inspire and prepare youth, particularly those underrepresented in STEM, to pursue STEM education and careers.

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DHF MAKERCAMP 2013

The Digital Harbor Foundation (DHF) is proud to present [MakerCamp](#). As part of the Maker Education Initiative, MakerCamp consists of four sessions running from June through August at the Digital Harbor

Foundation Tech Center in Baltimore's Federal Hill. The camp offers half-day and full-day options for youth between the ages of 7-10 (Nano Makers) and 13-17 (Mega Makers). Youth ages 11 and 12 are welcome to apply after speaking with a DHF staff member to determine best fit. Please visit the [website](#) for dates and information about registration.

Young Engineers and Scientists Seminars

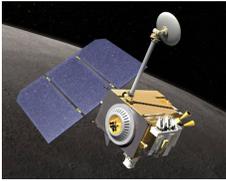
When: June 24 - 28, 9 am - 1 pm

Where: National Electronics Museum, Linthicum, MD

The Young Engineers and Scientists Seminars (YESS) presents a one-week

seminar for 6 - 9th grade students. During the week students will have the opportunity to compete in hands-on challenges, design, build and test a project, visit engineering facilities all while applying math and science knowledge and learning about careers in STEM. For more information, contact yesscoordinator@gmail.com.

Professional Development Opportunities



Unknown Moon Institute Educators Workshop

When: June 24 - 28, 2013

What: A 35-hour, 5 day institute, investigating the Moon

Location: JHU/APL, Laurel, MD

High school and upper level middle school science teachers are invited to apply to NASA's Unknown Moon Institute Educator Workshop. The Institute will provide numerous hands-on standards-aligned classroom resources that allow you to bridge content from the Moon to the Earth and address the **Next Generation Science Standards** and a variety of Science and Engineering practices. Other activities during this week-long workshop include providing opportunities to interact with lunar scientists, offering certification to bring lunar samples into your classroom, as well as tours of APL and NASA Goddard scientific research facilities. Still accepting applications, please apply at <http://www.lpi.usra.edu/education/workshops/unknownMoon/>.



Bioethics Intensives

When: June 17 - 21 and June 24 - 28. Week- and day-long courses available.

Join the Johns Hopkins Berman Institute of Bioethics this summer for introductory and advanced courses in Bioethics, offered through the Berman Institute Bioethics Intensives (BI2) program. BI2 provides an engaging bioethics educational opportunity for current students; medical, legal, and policy professionals; researchers; scholars and others. More information about the week- and day-long courses as well as links to register can be found on the Bioethics Intensives [website](#).



BioEYES: Successfully Increasing Student Interest in Science

When: July 19, 2013

Where: Carnegie Institution for Science, Department of Embryology, 3520 San Martin Drive, Baltimore, MD 21218.

BioEYES is hosting a seminar about its programs on Friday July 19, 2013. BioEYES uses live fish to engage K-12 students in science experiments. Learn about the program, see the results, and find out why teachers see an increase in students' excitement about science because of BioEYES. **Space is limited.** To RSVP, please contact BioEYES Program Manager Valerie Butler, at butler@ciwemb.edu or by calling (410) 246-3041.

We hope you have a wonderful summer and we'll see you in August!

Sincerely,



Greetings!

We hope the year is off to a great start. This newsletter has information about upcoming STEM events around the City along with some ideas for local, fun STEM field trips.

Enjoy,
The Center for Educational Outreach

Events and Opportunities for Students



Ready Set Design!

The Ready Set Design! program provides introductory engineering experiences for middle school girls in the Baltimore area, through half-day weekend programs at the Johns Hopkins University campus.

There are 2 sessions this fall, **September 21st** and **November 16th**. Find out more about times and locations [here](#).

Baltimore Innovation Week September 20 - 29, 2013.

Baltimore Innovation Week is a week-long celebration of technology and innovation in Baltimore. There will be over 30 events during the week including many for K-12 students.

Be sure to check out the [Baltimore Robotics Expo](#) on Monday **September 23rd from 3 - 9 PM** at 1001 West Pratt Street Baltimore, MD 21223.

For more information about that and other events, check out their [website](#).

Where: Society of Women Engineers Conference
Baltimore Convention Center
1 West Pratt St., Baltimore, MD 21201

When: Saturday, October 26, 2013 from 10am - 3:30pm

Who's Invited: Girls in grades 6-8, Parents and Educators, Volunteers

Invent It. Build It. Expo: A parallel program open to the public from 9am-2pm. Learn about engineering clubs, camps, after-school programs, best practices and grants. Download the [flyer](#) to learn more.

You can register for the event here: <http://weinvent2013.eventbrite.com/>

Get Out of Class! Check out some of the STEM field trips in and around Baltimore.

Target Grant for Field Trips

Deadline to Apply: September 30, 2013

Target stores award Field Trip Grants to K-12 schools nationwide. Each



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grant is valued up to **\$700**. They accept grant applications between noon CST Aug. 1 and noon **CST Sept. 30**. For more information visit their website [here](#).



Baltimore Museum of Industry

The BMI has educational programs and exhibits that explore the stories of Maryland's industries and the people who created and worked in them. Download their [educational brochure](#) to learn more about the different programs.

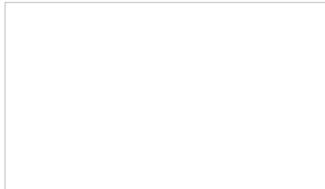
National Aquarium

Students in grades Pre-K-12 are **FREE** from September 2, 2013 - February 27, 2014. Teachers from some counties in Maryland **must attend the Aquarium's teacher orientation to qualify for free admission**. Find out more information at <http://aqua.org/learn/baltimore-field-trips>.



Dates for upcoming orientations:

Sept. 21, 2013 10:30 am & 12:30 pm
Oct. 26, 2013 10:30 am & 12:30 pm
Nov. 23, 2013 11:30 am & 1:30 pm
Dec. 14, 2013 11:30 am & 1:30 pm



Maryland Science Center

The Science Center welcomes educators and their classes to its Inner Harbor location throughout the school year with a variety of **FREE** options for in-depth exploration and enrichment experiences. Plus, the Maryland

Science Center's Traveling Science Program criss-crosses the Mid-Atlantic region every day delivering programs at schools, libraries, camps, and other gatherings. Read the [online guide](#) for more information on how to plan a field trip.

We look forward to seeing you out and around the City!

Sincerely,

Margaret Hart
Center for Educational Outreach



Greetings!

As the holiday season approaches, we are gearing up for some fun STEM events. Check out these programs available this winter.

Enjoy,
The Center for Educational Outreach

Upcoming Events



Maryland Science Olympiad

Gain experience and have fun with hands-on STEM activities with the nations' most exciting K-12 STEM competition, Science Olympiad! Maryland Science Olympiad is based on the Olympics format of an exciting tournament with a variety of science vs sports events. It is team-oriented, uses readily available materials, and is one of the most affordable STEM programs. Meet STEM career professional mentors at tournaments. Get you and your students ready for Next Gen Science Standards' emphasis on hands-on now!

For more information or to register a team:

Visit marylandscienceolympiad.org, or contact Kate McGuire at kate_m_mcguire@ymail.com. Select "Coaches and Teachers" tab to register a team.

Deadline for registration: **December 6, 2013**



JHU Robo Challenge: Training Session

The JHU Robo Challenge is an event for students in grades 6-12 where teams build a robot that can autonomously navigate a maze, create a robot dance, or be used for an innovative application. A training session for teachers, parents, and students will be held on **Saturday,**

January 11, 2014 to get them started with the most common robot kits. In the morning we will teach the basics of the Basic Stamp BoE bot and in the afternoon we will teach using the Arduino Robot. Please visit the [website](#) for more information or register [now](#).



Puzzles, Pizza, and Prizes

From 10AM to 12PM, on Saturday, January 18, 2014, middle and high school students

interested in language, psychology, math or computer science are invited to learn about computational linguistics from JHU graduate students and how it's used in cool research for Google, cell phones, Twitter, and more.

Students will learn new ways to solve problems and puzzles, work together with other students, and earn prizes. The event is located on the Johns Hopkins University Homewood campus and is completely free.

Click [here](#) for more details.



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NACLO Competition

NACLO (North American Computational Linguistics Olympiad) is a competition for students in grades 6-12. Students solve puzzles about language for prizes and a chance to represent the United States at the international competition.

The first round competition will be held on Thursday, January 30, from 10AM - 1PM at the Center of Excellence Stieff Building in Baltimore, MD.

For more information about the competition, registration, and directions visit the JHU NACLO [website](#).



KAVLI "SCIENCE IN FICTION" VIDEO CONTEST

The USA Science & Engineering Festival, in association with the Kavli Foundation, is now accepting student entries for the Science in Fiction video contest.

Students in grades 6-12 will investigate how science is portrayed in popular

movies, TV shows and video games. Winners will be honored in a special festival EXPO Awards show in Washington, D.C. during the weekend of April 26-27, 2014.

The contest officially opens for entries on **Nov. 1, 2013 and closes Mar. 21, 2014**. First prize is \$2000 cash prize and a travel stipend to travel to Washington D.C. for the Expo. The second prize is \$750 and the third prize is \$500. The People's Choice Award prize is \$250. Additional prizes include are available.

Visit the contest [website](#) for more details.

Classroom Opportunities and Beyond



Volunteer with the coolest science program around: BioEYES!

BioEYES is a remarkable program, engaging K-12 students in science. Based in Baltimore, educators from the Carnegie Institution for Science bring live zebrafish to local schools. Then, students mate the fish and study the resulting embryos. Zebrafish, being vertebrates, are physiologically and genetically similar to humans, but juvenile zebrafish are optically clear, allowing students to witness

their rapid development within one week: from a single-celled embryo to a larva with a circulatory system.

To learn more about bringing BioEYES to your classroom contact: Chandra Harvey, harvey@ciwemb.edu, 410-246-3041.

For more information visit www.bioeyes.org



NACLO Classroom Visits

NACLO (North American Computational Linguistics Olympiad) is a competition for students grades 6-12 for which Johns Hopkins is a test location. Visits are offered to Baltimore area schools with students interested in the NACLO competition. The class visit could be during school or after school and would

feature graduate students talking about why they love doing computational linguistics (with Q&A) and challenging your students with examples and puzzles.

Classroom visits for December and January are first-come, first-served, so send an email to jhu.naclo@gmail.com now.



Free NanoDays Kit!

NanoDays is a nationwide festival of educational programs about nanoscale science and engineering and its potential impact on the future. NanoDays is a week of community based-educational outreach events to raise public awareness of nanoscale science, technology, and engineering throughout the United States. NanoDays 2014 will be held from **March 29- April 6**. Science education and public outreach programs can fill out an [online application](#) for a physical kit containing all of the materials and resources you need to start planning your community events by **December 1, 2013**.



STEMNet

STEMnet provides a comprehensive suite of programs aimed at accelerating teacher and student growth in STEM. Programs currently on STEMnet include:

- STEM Specialist in the Classroom
- STEM Challenge Program
- STEM Resource Clearinghouse.

For more program information visit: <http://thestemnet.com>.

We hope you take advantage of these great opportunities. Enjoy the holidays and we'll see you next year!

Sincerely,

Margaret Hart
Center for Educational Outreach