



The CRCST Quarterly



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64 Years

FALL 2012

What's new in CRCST?

Renata Brown,
CRCST President

It sneaks up on me every year. The days are getting shorter, the nights a little crisper. I'm not ready to let go of summer just yet. Didn't it just begin? How is it that school is back in session already? Did I seriously put flannel sheets on the bed last weekend? Was that too much information?

It seemed as though the trees started changing colors a bit early this year, but the number one factor in the color change is the increase in length of night. The green chlorophyll production slows and other pigments, carotenoids and anthocyanins, are unmasked showing the reds, oranges, yellows, purples and browns of autumn.

This time of year is a great time to have your students practice observation skills, which we know are sorely lacking in most of us. Take your students outside daily and make note of what they see, smell, feel and hear in their science journals. Every day will elicit new observations and spark discussions of science concepts. And a little dose of sunlight each day is good for our vitamin D levels and mood!

In CRCST, fall means our conference is just around the corner so we are filling speaker spots and acquiring vendors and exhibitors. Do you know of a great presenter or topic that HAS to be included

this year? Send the information to me.

The conference is October 27 (see the included registration form and sign up now!) so the sooner you send that info to me, the better.

I hope your school year has started off wonderfully and that we'll see you and your friends on October 27!

Renata

Remembering a Hero

Neil A. Armstrong

August 5, 1930-

August 25, 2012



Ohio can boast about its many firsts, but one of the highlights is being first on the moon. Neil Armstrong, a native of Wapakoneta, Ohio was the first person to land a craft on the moon AND the first set foot on its surface!

In the early days of space flight, brave Americans volunteered to be a part of history. They invested themselves in programs that were exciting and dangerous. Neil Armstrong was among these early pioneers, and joined the National Advisory Committee for Aeronautics (NACA) in 1955. His first assignment was right in his backyard at the NACA Lewis Research Center (now NASA Glenn) in Cleveland.

Armstrong was an engineer, research pilot, test pilot and administrator until joining the ranks as an astronaut in 1962. His extensive

knowledge of high speed aircraft served him well, and he was assigned the distinguished title of Commander of the Gemini 8 mission in 1966. Incidentally, on that mission he performed the first successful docking of two vehicles in space.

On July 20, 1969 Neil Armstrong and Buzz Aldrin had the world watching with bated breath as they landed the moon and set in motion the next 43 years of space exploration. Six hours later, on July 21, Armstrong got it right when he described the event as "one small step for a man, one giant leap for mankind"

After a colorful career as a pilot and astronaut, Neil Armstrong spent his "post-space" years serving esteemed positions with NASA, where he continued to inspire the next generation of astronauts and pilots. He also served as a professor of Aerospace Engineering and spent time in the private sector.

The world will always remember Neil Armstrong as the first man on the moon, but we should also remember him for inspiring millions of scientists, engineers, aviators and Americans.

New in Town

Dr. Michelle
Pierre-Farid



Cleveland's newest appointee to the

post of Chief Academic Officer for the Cleveland Metropolitan School District. She comes to Cleveland from Washington, D.C., and brings with her a long list of successes. She served as a principal in both public and charter school environments and accomplished dramatic improvements in student performance in just a few short years. She also served as the Chief Academic Officer for Friendship Public Charter Schools, an organization that operates six public charter schools and manages five turnaround schools in the Washington, D.C. area.

Most recently, Dr. Pierre-Farid held a position with New Leaders, an organization dedicated to developing school leaders and helping them design effective leadership policies and practices for school systems across the country. She is also an alumna of this program.

Although her term began in early August, Dr. Pierre-Farid has jumped right in to her new role with both feet! She has been active in Cleveland since her appointment was announced in June, and has been spotted at teacher training days and school events in the community.

Times are changing in Cleveland, but Dr. Pierre-Farid's experience and leadership are a welcome addition to the city and its students. Please welcome Michelle to the community when you see her, and let her track record speak for itself.

Northeastern Ohio Science and Engineering Fair

Established in 1953, the Northeastern Ohio Science and Engineering Fair (NEOSEF) is a non-profit, all volunteer organization, whose goal is to get young adults interested in science and engineering by participating in a science and engineering competition. The Fair has been held every year since 1954 and is affiliated with the Intel International Science and Engineering Fair (ISEF).

During the four day event, approximately 600 students from over 80 schools in the area set up their science fair displays, discuss their projects with 260+ judges and compete for more than \$20,000 in prizes. One of the most rewarding aspects of NEOSEF is the opportunity for the students to discuss their research with professional scientists and engineers from the local area.

At the fair students compete in nine categories which are subdivided by grade levels. NEOSEF awards one 1st place, and multiple 2nd place, 3rd place and honorable mentions per subdivision. Students also compete for over 300 Special

Awards totaling more than \$15,000 that are donated by companies, societies and organizations.

NEOSEF selects students to move on to the next levels of competition: The International Science and Engineering Fair (ISEF) and Society for Science and the Public Middle School award (MSP). NEOSEF selects up to four 9-12th. Grade Grand Prize Winners to attend ISEF where they compete with almost 1,500 students from all over the world for over \$4,000,000 in scholarships and prizes.

Congratulations to this year's Grand Prize winners!



Grades 9-12 Grand Prize Winners

Nicholas Neill, St. Vincent St. Mary High School

Graham Gobieski, Beachwood High School

Shivani Bafna, Solon High School

Anirudh Dasarathy, Hawken Upper School



Grades 7-8 Grand Prize Winners

Amanda Spangler, St. Helen Elementary School

Jordan Elhindi, St. Francis of Assisi Elementary School

2013 NEOSEF will be held at John Carroll University on March 4th-7th. For more information, visit neosef.org

Local Science Happenings

Cleveland Botanical Garden

Not Quite Ripe! Sound Check Party Sept 21

Ripe! Local Food Fest Sept 22-23

Linking Science and Literature teacher workshop

Tuesdays Oct 9, 23, and Nov 13

Western Reserve Herb Society Her Fair Sat, Oct 13

Boo-tanical Bash Sat, Oct 27

Glow Wintershow Fri, Nov 23 – Mon, Dec 31

To register and for more information: www.cb garden.org

Cleveland Museum of Natural History:

Portable Planetarium Training Sat, Oct 20

Project WET Educator Workshop Sat, Nov 17

Portable Planetarium Training Sat, Feb 2

Ecology of Rare Ohio Habitats Tues-Wed, July 23-24

The Nature of Lunch Thur-Sat, July 25-27

To register and for more information:

www.cmnh.org/site/SRC.aspx

Cuyahoga Soil and Water Conservation District

Project WET (Water Education for Teachers) and Rain Barrel Workshop, Fri, Oct 12

To register and for more information:

<http://www.cuyahogaswcd.org/>

Cuyahoga County Solid Waste District

Clean Up, Green Up: Removing Home-Based Hazardous Materials, Sept 12 (Beachwood) and Oct 9 (Euclid).

Compost Seminars & Bin Sales: **Thurs, Sept 20**, Middleburg Heights, 7:00 pm, **Thurs, Oct 4**, Solon, 6:30 pm

Electronic recycling fundraiser, Midpark High School, Garfield Heights High School and St. Ignatius, Sat, Sept 29, 9:00 a.m. - 2:00 p.m. at each school.

To register and for more information:

<http://cuyahogaswd.org/>

Great Lakes Science Center

Evening for Educators: Tuesday, October 2, 4:30-7:30pm

Hands-On STEM Sampler: An introduction to Project-Based Learning, Friday, October 12, 9am-3pm

Home School Day at the Science Center:

Monday, October 22, 10am – 5pm

NEOSEF Planning Seminar:

Wednesday, October 24, 3:30-6:30pm

For more information and registration

visit www.greatscience.com

Money in Yo Pocket – Grants for Educators

Project Learning Tree

Do you have an idea for a school/community native plant garden, a forest improvement project, a streamside restoration plan, a recycling program, or energy conservation project for your students? Need funds to implement it? Apply for a Project Learning Tree GreenWorks! grant!

Deadline September 30. <http://greenworks.org/>

Green Thumb Challenge \$5,000 Grant

It's that time of year again! GEF and Gardener's Supply Company have teamed up on an exciting funding opportunity for established youth garden projects nationwide! The organizations are calling on schools and youth groups to submit chronicles of their garden projects in a race to win a \$5,000 prize. The award is designed to support the continued sustainability of an exceptional youth garden program that has demonstrated success, and has impacted the lives of kids and their community. *Deadline: September 30, 2012*

<http://www.greeneducationfoundation.org/greenthumbchallengesub/green-thumb-challenge-winners>

P. BUCKLEY MOSS FOUNDATION GRANTS – 2012

The P. Buckley Moss Foundation for Children's Education has grants available up to \$1,000 to be awarded to educators who need assistance to further their program goals.

Applications may be made for a grant up to \$1,000 to support a new or evolving project that integrates the arts into educational programming. The purpose is to aid and support teachers who wish to establish an effective learning tool using the arts in teaching children who learn differently.

GRANT APPLICATION REQUIREMENTS

Submit completed application plus 3 additional copies by *September 30th, 2012 for the 2013 school year to:*

P. Buckley Moss Foundation
ATTN: Grants Committee
152 P. Buckley Moss Drive
Waynesboro, VA 22980

<http://www.mossfoundation.org/national-educators-awards-and-grants>

The Captain Planet Foundation

The Captain Planet Foundation will fund as many projects as its annual resources allow.

All applicant organizations or sponsoring agencies must be exempt from federal taxation under the Internal Revenue Code Section 501, in order to be eligible for funding (this includes most schools and non-profit organizations).

Deadlines:

September 30th- typically for spring and summer projects

February 28th- typically for fall and winter projects

The Captain Planet Foundation primarily makes grants to U.S.-based schools and organizations with an annual operating budget of less than \$3 million. Grants are made for activities that conform to the mission of the Captain Planet Foundation which is to: promote and support high-quality educational programs that enable children and youth to understand and appreciate our world through learning experiences that engage them in active, hands-on projects to improve the environment in their schools and communities.

<http://captainplanetfoundation.org/apply-for-grants/>

Air Force Association Educator Grant

The Air Force Association believes that one of the most significant means to affect student learning is to fund grants to meet the unmet and unfunded educational needs of students. Each school year, the Association awards grants of up to \$250 to worthy projects that significantly influence student learning.

Important Dates for the 2013 Educator Grant:

July 1, 2012 – grant submission period opens

October 17, 2012 – grant submission period closes

January 2013- grant winners are announced

The Educator Grant program promotes aerospace education activities in classrooms from kindergarten through twelfth grades. The program encourages development of innovative aerospace activities within the prescribed curriculum.

Questions regarding the Educator Grant program should be directed to the program manager, Laine Martens, at 1-800-

727-3337 ext. 5806 or via e-mail at lmartens@afa.org.

The Frances R. Dewing Foundation

The FRD Foundation was created on April 4, 1963 by Frances R. Dewing. The monies of the FRD Foundation are to be used to provide "seed money" for intellectual stimulation of young children. The focus is on children up to grade 6.

The FRD Foundation is a small, non-profit, charitable organization that supports innovative ways of teaching young children. Approximately 20 to 30 grants are made per year. The FRD Foundation does not support groups that have many other sources of outside income, general funding, camperships, scholarships, campaign fund raising, medical problems, or individuals.

Deadlines: April 1 & October 1

Contact:

Frances R. Dewing Foundation

P. O. Box 45259

Madison, WI 53744

Phone: 401.749.8550

Fax: 608.298.7601

For more information: <http://www.frd-foundation.org/about04.html>

Herb Society of America Grant for Educators

The Herb Society of America's mission is to promote the knowledge, use and delight of herbs through educational programs, research, and sharing the experience of its members with the community. The Grant for Educators challenges individuals, groups or small businesses to develop and deliver learning experiences to the public. Each year, the Grant Committee anticipates funding one or two grants for a total of \$5,000.

The grant rewards innovative projects that enhance herbal education in school systems, in communities, or in any public forum (electronic or person-to-person). It requires learning goals and a mechanism to measure the educational outcomes.

Applications are requested from educators (formal or informal teachers), persons engaged/employed in botanical or horticultural activities, museum directors, botanical / garden writers, small herbal business owners. Proposals from students not be accepted. <http://www.herbsociety.org/resources/educator-grants.html>

Dominion K-12 Educational Partnership: Educational Grants from Dominion and the Dominion Foundation provide educators with the tools they need to revitalize math and science programs through the study of energy and the environment. For more information and application information, visit www.dom.com and search grants from the home page.



Cleveland Regional Council of Science Teachers
and
Cleveland Regional Association of Biologists

FALL CONFERENCE PRESENTER PROPOSAL FORM
Greater Cleveland Aquarium – Saturday, October 27, 2012

Name _____

Mailing Address _____

CITY STATE ZIP

School/Organization

Home Phone (____) _____ Work Phone (____) _____

E-mail Address _____

Presentation sessions are fifty minutes in length.

Title of Proposed Session _____

Brief Description (500 words or less): Attach additional sheet

Science/Topic Area (Check all that apply.)

- ☐ Earth/Space Science ☐ Biology/Life Science ☐ Chemistry/Physical Science
☐ Environmental Science ☐ Physics/Physical Science ☐ Integrated/General
☐ AP (specify area) _____ ☐ Other _____

Intended Audience (Check all that apply)

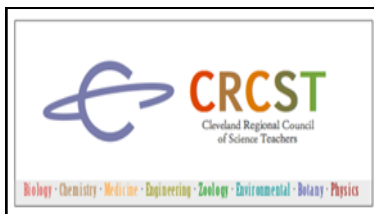
- ☐ Elementary ☐ Middle School ☐ High School
☐ College ☐ Pre-service or new teachers ☐ General

Equipment Requirements: (Check all that apply)

- ☐ LCD projector/Laptop Computer ☐ Overhead projector ☐ VCR/TV ☐ Other _____
☐ DVD/TV ☐ Internet connection ☐ Sink/water

Presenters receive one year of free membership in CRCST or CRABS.

Return (by Oct 1) to Susan Clay suzieclay@aol.com



Cleveland Regional Council of Science Teachers

42nd Annual Fall Conference

Greater Cleveland Aquarium



Tentative Schedule

7:30 – 8:15 am	Registration, continental breakfast, networking & browsing vendor displays
8:30 - 9:15 am	Concurrent session I
9:15 - 9:30 am	Annual Membership Meeting
9:30 - 10:15 am	Keynote address
10:20 – 10:50 am	Vendors and refreshments
11:00 - 11:45 am	Concurrent session II
11:55 - 12:40pm	Concurrent session III
12:40 - ???	Explore vendors, network with colleagues, & enjoy the Aquarium

Concurrent session topics include life, earth/space, physical, and integrated science for elementary through college classrooms. Give-aways and vendors back by popular demand. Explore the Aquarium, other professional science education organizations displays, and more.

Questions: Susan Clay: (440) 570-1155

CRCST Fall Conference 2012 Registration

	<i>Early-bird (by Oct. 7)</i>	<i>On-site</i>	Membership in CRCST or CRABS is required Additional donation to CRCST - \$ _____
Conference only (existing member)	\$25	\$30	
1 year CRCST membership & conference	\$40	\$45	
2 year CRCST membership & conference	\$55	\$60	
3 year CRCST membership & conference	\$70	\$75	
1 year CRCST membership & conference <i>(full time education students)</i>	\$20	\$25	
1 year CRCST/CRABS membership & conference	\$45	\$50	
2 year CRCST/CRABS membership & conference	\$65	\$70	
3 year CRCST/CRABS membership & conference	\$85	\$90	

Name: _____ Phone (____) _____

Address: _____

City: _____ Zip _____

School/Work Site _____

City: _____ Zip _____

Phone: (____) _____ E-mail _____

Make check payable to **CRCST**

Mail to: Mark Waner, Dept. of Chemistry, John Carroll University
1 John Carroll Blvd., University Heights, OH 44118