Nebraska Science News

Nebraska Academy of Sciences **Nebraska Association of Teachers of Science**

Serving Scientists and Science Educators Across the State of Nebraska

Fall, 2014-2015 **Volume 18, No.1**

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FROM THE NAS PRESIDENTS' DESK

An undergraduate student who is invited, as part of her work-study, to help tabulate results of a zebra fish study. A researcher who regularly compiles and analyzes data that, in an easily understood format, is picked up by national news services. A geology doctoral student who learned at the side of a mentor, then later leads generations of students at a unique fossil dig. An eight year old child who wants to figure out how to keep her lemonade cool for a longer amount of time while outside on a hot summer day. A high school student who contributes to the national understanding of water quality. Nebraska is home to a diverse population of scientists, from the internationally renowned to the emerging young adults to the young children with bountiful questions.

I cannot recall "the moment" in my life when I discovered that science was "cool" to do. Maybe it was because I grew up with many outdoor experiences, from weeks in the forests and lakes of Minnesota's Boundary Waters, watching the concentric circles spread after water dripped from my paddle; walking on the edge of snowfields in the Grand Tetons where little flowers bloomed for their brief summer; exploring the tides, marine life and temperate rain forests of Alaska's Inside Passage; stepping out of our tent into the morning sunlight in the Niobrara River valley, seeing the diversity of plant life at "nature's crossroads"; or spending summers on my grandparents' farm on the edge of the Sandhills, with the smells and textures during the day and dark night skies. Part of my life's direction was guided by a series of teachers and professors who inspired me, challenged me, and most importantly, made me communicate my thoughts and insights. However, it wasn't until after I had taught 8th grade science for several years that I discovered that I was attracted to "science". I still have interests in history, art, human geography and current events, but few things excite me quite like trying out a hypothesis, guiding a young person through the personal discovery of a concept, or hearing somebody share their experiences and insights.

The Nebraska Academy of Sciences was founded in 1880. The objectives of the Nebraska Academy of Sciences are to further the work of scientists and to facilitate cooperation among them; to improve the effectiveness of science in the promotion of human welfare and environmental quality; to provide the opportunity for scientific research related to the problems of the ever-changing environment of the Great Plains; to increase public understanding and appreciation of the importance and promise of science in human progress; to stimulate science education, and to encourage young people to become involved in science, and to foster the interaction of business, industry, government, education, and the academic scientific community. To be a part of an organization that aligns with my interests and passions has benefited me personally and professionally. It is an honor to help lead this organization with a long history and a bright future.

What is your "science story"? Most importantly, who will you share your story with tomorrow?

Dan Sitzman, NAS President

GREETINGS FROM THE NATS PRESIDENT

"All the world is a laboratory to the inquiring mind" – Martin H. Fischer, American physician and author.

Welcome back to school, 2014. For many of you, school started earlier this year than in the past, and you and your students are well into the routine. I am betting that for even those of us "seasoned" teachers, the anticipation, excitement and even nervous butterflies started when the calendar page turned to August. As I thought about what to write for the fall newsletter, I wanted to find the words

to express the importance of science education in our 21st Century. I thought the above quote summed it up quite nicely. Everything we know and learn, starts with a question, which is the essence of scientific inquiry. Never underestimate your power as a science educator. Research indicates that the teaching of science skills shows positive effects on student performance in reading, language arts and mathematics. For a compilation of research findings, check out the following link. http://ejse.southwestern.edu/article/view/7589/5356#top

I want to remind you that as you prepare your lessons and look for resources to help you with the important task of developing inquiring minds, don't forget to check out the NATS website for notices and updates on upcoming events and professional opportunities. Another great place to explore is the Nebraska Department of Education Science Education site. If you are looking for a way to get involved, check out the information regarding the **National Science Olympiad to be held in Lincoln!** It will take many volunteers to make this a successful event. On the national front, the NSTA website has so much to offer. As I mentioned in the spring newsletter, I am trying to learn as much as I can about the Next Generation Science Standards. For more information, NGSS@NSTA *Resources* tab has a variety of professional learning resources from video conferences and web seminars, to journal articles, books and handouts. **Finally, for a professional learning experience sure to be a memorable and valuable event, I encourage you to attend the upcoming NATS Fall Conference, September 25-27, at Camp Calvin Crest in Fremont.** Our President–elect, Joe Myers, has been working diligently to plan an exciting and educational science experience. Incredible speakers, entertainment, and of course, session presentations, you won't want to miss it! Look for more information, as well as highlights from this summer's National Congress on Science Education, in Joe's article in this newsletter.

Thank you all for your commitment to science teaching and learning. I wish you a successful 2014-2015 school year.

Katie Ramsey, NATS President

NOTES FROM THE NATS FALL CONFERENCE PROGRAM CHAIR

Science is the highest personification of the nation because that nation will remain the first which carries the furthest the works of thought and intelligence.
Louis Pasteur

As President-elect of NATS, I had the honor of representing educators across the great State of Nebraska at the National Congress on Science Education hosted by NSTA in Washington, DC July 16-19. The theme for the Congress was **Breaking Down the Walls: Take Scientific Literacy to Everyone, Everywhere**. This year's agenda focused on NGSS (Next Generation Science Standards), Informal Science and good science education practices. The National Congress on Science Education meets annually and consists of one voting delegate from each of the 94 NSTA Chapters and Associated Groups. The Congress meets to discuss issues and bring forth recommendations that may be of interest to NSTA and the science education community. Delegates and other local leaders benefit from attending the summer congress, which provides opportunities to network with other science leaders from the US and Canada, attend leadership workshops to assist them in their association role, represent their members as a voting delegate, attend focus groups to address national issues and formulate debate and adopt resolutions, meet and work with the NSTA elected leaders and staff.

One major benefit for our state association was being able to personally connect with NSTA leaders, including NSTA President-elect, Dr. Carolyn Hayes. While at the conference, with help from Dr. Sally Harms, Wayne State Professor and NSTA Board Member, we were able to extend a personal invitation to her and later confirm Dr. Hayes attendance and participation at our NATS Fall Conference! Dr. Hayes will present twice at NATS and I can't wait to spend some time one-on-one with her and find out more of her vision for NSTA and how NATS can grow and flourish in the years to come. As an added bonus, Ted Willard, Program Director for NSTA agreed to also attend and present as well! In his role at NSTA, he oversees the COMPASS Project which is an effort to support teachers in implementation of the Next Generation Science Standards. If you don't know what NGSS is, or have questions about NGSS, you will not want to miss out on his presentations!

Speaking of the NATS Fall Conference, mark your calendar for September 25-27, fill out your substitute lesson plans, invite a new teacher or a teacher who has not recently attended, and pack your bags for a great time at Camp Calvin Crest! Your board members have worked hard to bring you a great conference! We have over 50 presenters lined up to bring you great lessons to bring back to your classroom along with a full line-up of speakers, great workshops, and lots of time to socialize and network, or simply relax by taking a nature-hike and bird-watching. Our keynote speakers include Dr. Ramsey Musallam and Dr. Elizabeth Jones. Dr. Musallam's mission is to create learning environments grounded in curiosity and fueled by a sense of exploration. He believes that when student questions are placed before teacher voice, rich and responsive learning experiences can occur in any setting, and in any context. Technology can be a strategic partner

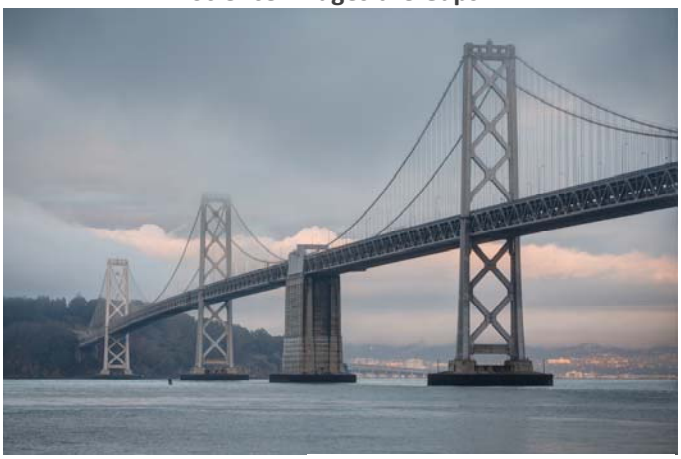
in this process. Dr. Musallam has been featured on "Ted Talks", Three Rules to Spark Learning. As a high school chemistry teacher, Ramsey Musallam expands curiosity in the classroom through multimedia and new technology.

Dr. Jones is an Associate Professor in the University of Nebraska–Lincoln Civil Engineering Department. She will be speaking about the UNL Student Chapter of Engineers Without Borders -USA. Dr. Jones' research areas include Traffic Flow Theory, Intelligent Transportation Systems, and Transportation Systems Analysis.

Joe Brogie will be our entertainment prior to and during the steak dinner on Thursday evening. Joe creates wonder, making the impossible seem possible with psychological suggestion, misdirection and sleight of hand. Joe breaks the stereotype of magicians with rabbits and top hats. His versatile style includes hypnosis, tradition magic, mentalism, audience engagement and just plain fun.

You will find workshop details on page 6-8 of this newsletter.

Please join us – our theme this year is
"Science Bridges the Gaps".



Joe Myers, NATS President-Elect
and Fall Conference Program Chair

The following comments are derived from a blog by Liz Neely, dated August 12, 2013, with references to Thomas S. Kuhn's "The Structure of Scientific Revolutions".

Can Science Still be Trusted?

Because of challenges to certain assumptions about the reliability of science in recent years, the question has arisen: "Is the public losing faith in science?" Challenges range from the refusal to accept scientific "inconvenient truths" about climate, to periodic reversals of general assumptions about the health factors of smoking (as recently as the early '60's, many scientists still claimed smoking had predominately beneficial effects, with some brands recommended by doctors), to the role of fats and sugars in our diets. Regulatory agencies cite science as support for policies that seem obviously impractical or even refutable to the layman. Put this in the context of a time when almost all of our social institutions seem to be regarded poorly; one is led to seek quantitative data to answer this question.

The Pew research group has investigated this issue and reports that in the last 5 years a fairly consistent 65% of the public believes that science has contributed "a lot" to society. While there has been no significant failure or decline of confidence here, it should be noted that 20% felt that science had contributed only "some" to society. Two less trusting groups emerge; those describing themselves as conservatives, and, perhaps surprisingly, the more highly educated.

Yet the implied assumption by scientists is that they deserve a higher rating of esteem and reliability; otherwise the question might never even be raised. Two explanations are commonly put forth:

1. The deficit model: Too many people simply do not understand what science is.
2. The ideological model: Science is fine unless and until its conclusions conflict with closely held religious or political beliefs, or economic constraints.

One can pursue an investigation of these two explanations, or perhaps, consider others. Let's try to accept the idea that science, like religion and economic and political ideologies, is a belief system. In a technological society like ours, we rely heavily on science. Yet we must also communicate an understanding that scientific truth is not absolute truth. Some science is so reliable we may regard it as unassailable, but the fact is that scientific truths are by nature **tentative**, always subject to review and challenge. In fact, **skepticism** is the essential basis of science; without it the scientific model becomes little more than the outline of a ritual. According to Thomas S. Kuhn, upheavals occur regularly in science when "established" truth is challenged by contrary evidence and/or alternative theories. We must help the layman realize that the true nature of science is not absolute eternal truth, but a constant journey toward a more refined and accurate depiction of the material world, subject to necessary challenges and changes with the aim of achieving improved understanding of the natural world.

Aurietha M. Hoesing, President/State Director
Nebraska Junior Academy of Sciences

ACADEMY WEB SITE UPDATES

The NAS/NATS/NJAS web site is adding new content all the time. NATS Fall conference attendees can register on line. Give it a try. http://nebraskaacademyofsciences.wildapricot.org/page-1228210

Our newsletter is available to members and can be downloaded saving money and resources. The Transactions has been converted to on-line digital copy available through UNL Digital Commons as well as EBSCO Publishing. Publishing digitally allows us to upload research articles as they are submitted resulting in more timely distribution of research information. For information about accessing or submitting Transactions articles go to our website: www.neacadsci.org. Click on NEWS; then click on Publications (found on the left side bar).

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PIE GRANTS UPDATE

24 applications were received for the April 4th, Public Information and Education Mini-grant 2014 deadline totaling $67,996.00. Nine grants were approved for a total of $24,184.00. Recipients were Omaha Schools Foundation – Growing Flora of Nebraska Pollinators; A. Jewell Schock Museum of Natural History, WSC – Habitat and Stream Monitoring of Dog Creek; Board of Regents/UNL – Running Rain; Keep it Clean! Slow it Down! Soak it In!; Lincoln Community Foundation – Southern Heights Food Forest Pollinator Garden; WasteCap Nebraska, INC. – 2014 Sustainability Summit: Zero Waste Roadmap; Groundwater Foundation – Educating the Next Generation of Water1ders; Arian Olivera – Natural Nebraska; WasteCap Nebraska, INC. – Online Recycling Guide; and Tri-Basin NRD, et. al. – Water Jamboree.

The Public Education and Minigrant program awards up to $3000 to support the presentation and dissemination of information and perspectives that will stimulate enhanced environmental stewardship in any category eligible for Nebraska Environmental Trust (NET) funding. These categories are habitat, surface and ground water, waste management, air quality, and soil management.

Fourth quarter PIE grant applications are due October 3, 2014. Grant forms and information can be found on our website, www.neacadsci.org. Click on NAS and then click on Grants and Scholarships.

The Nebraska Environmental Trust
preserving NATURAL NEBRASKA™ for future generations

2015 SCIENCE OLYMPIAD

The 2015 Nebraska Science Olympiad will be held on April 25 at UNL's City Campus as we prepare to host the 2015 national event (the 2016 Nebraska Science Olympiad event will return to UNL's East Campus). On May 14-16, UNL will host the National Science Olympiad event, which will bring 3,000 guests to Lincoln from across all 50 states and Japan. More event information will be available soon, but if you would like to volunteer (we will need approximately 500-600 volunteers), please contact Jon Pedersen at jep@unl.edu. We hope that we can count on the science and science education community to be big supporters of this national event.

REMINDERS

1) **Register to attend the 2014 NATS Fall Conference.** You can register using the form in this newsletter or you can also register on line from the Events tab on our website: www.neacadsci.org. There will be sessions in all the different science disciplines as well as numerous sessions for elementary teachers. NATS will NOT be making hotel reservations this year. If you wish to stay at Camp Calvin Crest please return your registration early. ***Hotel reservations are on your own this year!!! Holiday Inn Express is offering a discount to NATS registrants.***

2) Pre-Service and New Teacher scholarships to cover lodging and meals are available for the NATS Fall Conference. Contact Jodi Bahr for more information and forms mailto:jbahr@esu9.org

3) **The next Public Information and Education mini-grant deadline is October 3rd.** Grants are awarded in any amount up to $3000.00. Fourth quarter deadline is October 3, 2014.

4) **Start thinking about your abstract submissions for the Nebraska Academy of Sciences spring**

meeting. The Call for Papers and the list of section chairs is included in this newsletter. Presenter registration and abstract instructions are on the website.

5) **Collegiate Scholarship and High School scholarship information is available on the website**. The collegiate scholarship application deadline is February 1, 2015 and the high school scholarship application deadline is March 1, 2015.

REMEMBERING GAYLE ELLISON

4/15/1945 – 4/24/14

Gayle Ellison was a valued member of the NATS community and will be missed by students and teachers, as well as his many friends and family. Gayle was a NATS member for 31 years, past NATS board member from 1990-1992, and newsletter editor from 1992- 1997. Gayle received the Nebraska Association of Teachers Catalyst Award in 2007 for his numerous contributions to both NATS and science education in Nebraska.

Gayle receives Catalyst Award from Sally Harms

Gayle taught school one year in Superior, then taught for the next 42 years at Lewiston Consolidated School. He continued to serve as a substitute teacher after he retired. Gayle was a past mayor of Lewiston, a member of the Elks Club, Lions Club, and the Nebraska State Education Association. One of Gayle's friends noted that Gayle "was a very high level science teacher-traveled the world with his student in contests. He was way ahead of his time." Gayle was always ready and willing to help anyone in need and mentored many new teachers during his career. One could always count on him for support and encouragement.

KICKS3 SUMMER INSTITUTES

The summer 2014 Nebraska MSP Science KICKS3 summer institutes were a huge success. We "kicked" off our summer with the K-12 Earth Science Institute at Cedar Point Biological Station for week one and Chadron State College for week two. The K-12 Life Science Institute took place in mid-July at Culler Middle School in Lincoln. Many thanks to all of our formal and informal partners including UNL-CPBS, Chadron State College, Toadstool State Park, Lake McConaughy Water Interpretive Center, University of Nebraska–Lincoln, Lower South Platte NRD Salt Creek Saline Wetlands, and the Spring Creek Prairie Audubon Center.

The Earth Science and Life Science content specific KICKS3 institutes allowed for deeper content coverage at all grade levels and for a more fully developed integration of science (inquiry) and engineering practices. This summer's KICKS3 institutes provided opportunities for extension of teacher content knowledge beyond grade level assignment as well as exploration of how the Nebraska State standards translate into classroom content and practice at the grade band level. Because there was a part to whole and whole to part nature to the structure of the summer workshops and because K-12 teacher participants were at the same site there was also opportunity to explore K-12 content progressions in science. Further deepening teacher understanding of science content, particularly as it relates to student readiness, age appropriate content and science curriculum.

One measure of the success of the project is teacher implementation of both grade level appropriate content and content pedagogy. Teacher participants will continue their KICKS3 experience in the follow-up coaching component of the workshop series. Peer coaches will provide the necessary reflection, dialogue and feedback experiences to support teacher participants back in their classrooms.

DROUGHTS, FLOODS AND THE EARTH'S GRAVITY, BY THE GRACE OF NASA

When you think about gravitation here on Earth, you very likely think about how constant it is, at 9.8 m/s2 (32 ft/s2). Only, that's not quite right. Depending on how thick the Earth's crust is, whether you're slightly closer to or farther from the Earth's center, or what the density of the material beneath you is, you'll experience slight variations in Earth's gravity as large as 0.2%, something you'd need to account for if you were a pendulum-clock-maker.

But surprisingly, the amount of water content stored on land in the Earth actually changes the gravity field of

where you are by a significant, measurable amount. Over land, water is stored in lakes, rivers, aquifers, soil moisture, snow and glaciers. Even a change of just a few centimeters in the water table of an area can be clearly discerned by our best space-borne mission: NASA's twin Gravity Recovery and Climate Experiment (GRACE) satellites.

Since its 2002 launch, GRACE has seen the water-table-equivalent of the United States (and the rest of the world) change significantly over that time. Groundwater supplies are vital for agriculture and provide half of the world's drinking water. Yet GRACE has seen California's central valley and the southern high plains rapidly deplete their groundwater reserves, endangering a significant portion of the nation's food supply. Meanwhile, the upper Missouri River Basin—recently home to severe flooding—continues to see its water table rise.

NASA's GRACE satellites are the only pieces of equipment currently capable of making these global, precision measurements, providing our best knowledge for mitigating these terrestrial changes. Thanks to GRACE, we've been able to quantify the water loss of the Colorado River Basin (65 cubic kilometers), add months to the lead-time water managers have for flood prediction, and better predict the impacts of droughts worldwide. As NASA scientist Matthew Rodell says, "Without GRACE we would have no routine, global measurements of changes in groundwater availability. Other satellites can't do it, and ground-based monitoring is inadequate." Even though the GRACE satellites are nearing the end of their lives, the GRACE Follow-On satellites will be launched in 2017, providing us with this valuable data far into the future. Although the climate is surely changing, it's water availability, not sea level rise, that's the largest near-term danger, and the most important aspect we can work to understand!

Learn more about NASA's GRACE mission here: http://www.nasa.gov/mission_pages/Grace/

Kids can learn al about launching objects into Earth's orbit by shooting a (digital) cannonball on NASA's Space Place website. Check it out at: http://spaceplace.nasa.gov/how-orbits-work/ Dr. Ethan Siegel
NASA Space Place Partners' Article

NSA STEM WORKSHOP RESOURCES

Over the last 3 years, the National Science Foundation has sponsored a series of STEM Smart Workshops which have showcased promising practices and resources in support of effective K-12 STEM Education in schools and programs. We invite you to visit the collection of resources from past meetings. To learn more about a meeting, please click on the agenda and resources links listed below.

Philadelphia, PA – Launching the STEM Smart Initiative: Agenda | Resources

Seattle, WA – Successful K-12 STEM Education: Agenda | Resources

Chicago, IL – Partnerships in K-12 STEM Education: Agenda | Resources

Las Vegas, NV – Using Technology to Promote K-12 STEM Learning and Teaching: Agenda | Resources

Baltimore, MD – College and Career Readiness: Agenda | Resources

Atlanta, GA – K-12 Engineering: Agenda | Resources

Washington, DC – Early Childhood Education: Agenda | Resources

Needham, MA – Career and Technical Education: Agenda | Resources

In addition, you may access briefs on each meeting topic here.

We hope you find these resources beneficial. If you have any questions or concerns, please email us at successfulstemed@edc.org.

2014 FALL CONFERENCE WORKSHOPS

On the following page you will find the list of Thursday workshops to be held during the NATS Fall Conference. Workshop times vary. We have one off site field trip. Participants will meet at Camp Calvin Crest for the Prairie Ecology Field Trip. Transportation will be provided. There is another off site lecture on the UNL City Campus. No transportation is provided for this lecture so attend the lecture then drive out to the conference. Tickets are available from Joe Myers, joemyers@npsne.org.

Six workshops will be held at Camp Calvin Crest. Most will start promptly at 1:30 p.m. on Thursday, September 25. We have some great presenters lined up so please consider attending. Register early as some of the workshops will have a limit on participants.

There will also be four invitation only sessions on Thursday morning and afternoon for Earth Science Institute, KICKS3, and LINKS participants.

WORKSHOPS ~ THURSDAY ~ 9:00 A.M.-4:30 P.M.
NOTE: PRESENTATION TIMES VARY

Sign up for workshops by September 15th or earlier. Early sign-up is not mandatory but helps with planning. Some workshops are limited in size so early registration is advisable. Send your form to Cecelia at nebacad@unl.edu or fax to 402-472-8899. You will also be able to register for a workshop on line. Workshop registrants must also register for the conference.

☐Field-based Inquiries into Prairie Ecology
Alicia Mullarkey
Field Trip, meet in front of Proett at Camp Calvin Crest
1:30-4:30 p.m.
Grade Level: 4-12
Prairies are the native ecosystem for Nebraska's natural heritage. Participants will engage in inquiry-based approaches to teaching about prairie ecosystems applicable across the state. We are particularly interested in having teachers without field experiences in prairie ecology participate. Transportation will be provided to visit an off-site prairie.

☐"Understanding and Assessing Climate Change: Implications for Nebraska"
Heuermann Lecture Series
Off- Site, no transportation provided
UNL
3:30- 5:30 p.m.
On the UNL Innovation Campus (for tickets to the lecture email Joe Meyers at joemeyers@npsne.org)

☐Weather and Climate in the Classroom
Ken Dewey
Camp Calvin Crest, room TBA
1:30-4:30 p.m.
Grade Level: ALL
We will explore weather and climate science with demonstrations and hand-on activities that can be brought directly to the classroom; which will help your students identify questions, form hypotheses, and conduct scientific investigations. We will provide you with examples of how to engage the students in gathering, analyzing, and interpreting data.

☐Conceptual Change: Designing Standards-Based Biology Instruction for All Students
Susan Koba
Camp Calvin Crest, room TBA
1:30-4:30 p.m.
Grade Level: SH
Nebraska has not adopted the Next Generation Science Standards, but the changes in NGSS provide great opportunities to better serve our biology students and still align with state standards. Experience NGSS and state-aligned instructional design and tools that support conceptual change and build STEM connections to enhance learning opportunities for students.

☐Base Illuminated Magnetic Stirrer
Doc Gizmo
Camp Calvin Crest, room TBA
1:30-4:30
Grade Level: All
Assemble and build your own variable speed, lighted, magnetic stirrer. Each kit provides all instructions and parts. Tools are provided. Max time needed is 3 hours but if you have prior experience with tools and soldering you can complete it in less time.

☐**LEGOS: Not Just for Kids Anymore**
Bob Feurer, Chad Johnson, Joe Meyers
Camp Calvin Crest, room TBA
1:30-4:30
Grade Level: K-12
LEGOs robots offer a myriad of math, science and engineering opportunities. This workshop will allow teacher teams to build, program and use the sensor capabilities of Mindstorms robots to evaluate their effectiveness in the classroom. College engineering classes incorporate them into their coursework. Will they work in yours?

☐**Nebraska Physiological Society**
Alicia Schiller
Camp Calvin Crest, room TBA
Time: TBA
Grade Level: K-12
See how you can connect with NPS in your classroom using Vernier sensors.

☐**Ignite Your Student's Learning with Energy Education**
Jennifer Swerczek
Camp Calvin Crest, room TBA
1:30 – 4:30
Grade Level: 4-6/MS
Light a spark in your students learning with fun, engaging activities. This workshop will explore lessons that can be used to teach physical and life science concepts related to energy education

INVITATION ONLY SESSIONS

Earth Science Institute (Invitation Only)
Dr. Mindi Searls
Camp Calvin Crest, room TBA
Grade Level: 6-12
9:00-Noon
Teachers at the 6-12 level are invited to apply to attend the 2014 Earth Science Institute to learn more about Earth science and the geology of Nebraska. The Earth Science Institute will hold a series of 3 hands-on workshops to educate teachers and provide them with materials that they can import into their curriculum. Since one of the best ways to learn about geology is in the field, we will spend time outside exploring the geology of Nebraska.

LINKS/Science Matters Key Leaders/ESU Science Cadre Meeting
Sheree Person-Pandil
Invitation Only
Proett Lower Nelson N/S
9:00-11:30

KICKS 3 Sessions
Deb Paulman
Invitation Only – For all participants from the 2014 KICKS3 Summer Institutes.
Proett Mtg Rooms
1:30-4:30

LINKS Focus Group
Proett Lower Knox
1:00-2:00

Photocopy this form as needed

Please TYPE or Print Legibly in INK

This conference is partially supported by NSEA and NSTA
http://www.neacadsci.org/nats/Conferences

Early Registration, 2014 Conference Dates are Sept 25- Sept 27

Register on line at www.neacadsci.org/ Click on Events

Name School ESU

Home Address School Address

City State Zip City State Zip

Email School Ph Home Ph

Teaching Assignment ☐Elementary ☐Middle/JR High ☐Senior High ☐College ☐Pre-service

If you received any science teaching awards between November 2013 and September 2014 please list _____

Would you like a copy of *The Yearly Proceedings of NAS*? ☐ Yes ☐No
May we use pictures of you taken at Fall Conference in our newsletter, on our website or in publications to promote NATS? ☐Yes ☐No

We would like to forward you information about science opportunities, grants, conferences, camps via email unless you decline. ☐No

CONFERENCE REGISTRATION
(Postmarked by September 5)

☐*$105 Includes conference & NAS/NATS Memberships*

☐*$60 Saturday only conference & NAS/NATS Membership*

☐*$45 Pre-Service Teacher, Student, or Non-teaching spouse*

LATE REGISTRATION
(On-site or after September 5)

☐*$130 Includes conference & NAS/NATS Memberships*

☐*$70 Saturday only conference & NAS/NATS Membership*

☐*$55 Pre-Service Teacher, Student or Non-teaching spouse*

WORKSHOP REGISTRATION FOR THURSDAY, SEPTEMBER 25th to be posted in August

ACCOMMODATIONS – NATS is only providing lodging at Camp Calvin Crest. Hotel arrangements are on your own!!!

Roommates must submit together!

Camp space is limited, so register early. Camp space is assigned on first come, first reserved basis.

LODGE: Bedding and towels provided.
CABINS: Bring your own bedding and towels.

Hotel arrangements by NATS are no longer an option; you must make your own payment and reservations for a hotel.

For Lodging Assignment Purposes Only
☐Female ☐Male

☐Special accommodations required, handicapped, etc.
Specify_____

Staying 2 nights? The BEST DEAL INCLUDES ALL LODGING AND MEALS

☐Lodge $135 (Bedding and Towels Included)
☐Cabin $ 115 (Bring Your Bedding And Towels)

One-night LODGING ONLY (CHECK THE LODGING YOU WILL NEED)

☐Thursday Night Lodge $ 45
☐Thursday Night Cabin $ 30
☐Friday Night Lodge $ 45
☐Friday Night Cabin $ 30

MEALS ONLY (CHECK THE MEALS YOU WILL NEED)

☐Thursday Steak Fry $14.00
☐Friday Dinner $10.00
☐Friday Breakfast $7.00
☐Saturday Breakfast $7.00
☐Friday Lunch $8.00
☐Saturday Lunch $8.00

Return forms to: nebacad@unl.edu, or NATS, 302 Morrill Hall, 14th and U Street, Lincoln, NE 68588-0339, fax 402-472-8899, questions 402-472-2644

Checks payable to: NATS

Registration Total $_____ Organization to be Billed

Lodging and Meals Total $_____ _____

TOTAL $_____ Do you need a Receipt?

Amount Enclosed $_____ _____Yes _____No

CREDIT CARD PAYMENT ☐Master Card ☐Visa ☐Discover

Card Number_____

3 Digit Security Code (on back of card)_____ Expiration Date_____/_____

Name on card_____

Address of cardholder_____

THE NEBRASKA ACADEMY OF SCIENCES, INC.
(Founded January 30, 1880)
124th ANNUAL MEETING TO BE HELD
at
NEBRASKA WESLEYAN UNIVERSITY
50TH and ST. PAUL, LINCOLN, NEBRASKA

FRIDAY, APRIL 17th, 2015

"Call for Papers"

ABSTRACTS, FORM, AND FEES ARE DUE TO SECTION CHAIRPERSONS
FEBRUARY 6, 2015

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