

# Nebraska Science News



Nebraska Academy of Sciences



Nebraska Association of Teachers of Science

***Serving Scientists and Science Educators Across the State of Nebraska***

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## FROM THE NAS PRESIDENTS' DESK

NAS would like to introduce the new Executive Secretary, Michelle Lopez. She began her new position with NAS on January 22, 2018.



Michelle Lopez, the new Executive Secretary of NAS, pictured with her family

Michelle is a true Nebraska native: born in Columbus, raised in Kearney, and now a Lincoln resident for over 10 years. She earned her Bachelors' in Human Relations from Doane University. Michelle's work history involves several non-profit organizations including social work and education. Most recently, she worked with Nebraska's public school administrators, assisting with professional development events. On a personal note, Michelle enjoys traveling, reading, writing, baking, and spending time with her husband, daughter, and pug.

Michelle is eager to meet the members of NAS and NATS and has a lot of ideas for the future of our organization. To name a few, she hopes to improve the website, expand communication with members, and develop a greater sense of community between scientists, faculty/staff, and students. Michelle would love to hear from you! If you have ideas, comments, or you simply wish to say hello, please contact Michelle. She can be reached in person, via phone, social media, or email. Please help me welcome Michelle to NAS/NATS!

Karin van Dijk, NAS President  
University of Nebraska–Lincoln

## NATS PRESIDENT NEWS and VIEWS

Spring is right around the corner and this means the 2017-2018 school year will be coming to an end before we know it. I understand that this time of year is very busy but there are still a few opportunities for additional professional development before the end of the school year. I am excited to announce that we will have our first pop-up conference on April 7, 2018. We have partnered with the Nebraska Groundwater Foundation and the Omaha Henry Doorly Zoo. The pop-up conference will allow educators to dive deeper into phenomena-focused curriculum, the two types of groundwater models, and to shadow zoo keepers. We are excited to offer this opportunity to the science teachers of Nebraska and are working on creating pop-up conferences across our wonderful state. SciComm is an additional opportunity this spring, it will be held at the University of Nebraska-Lincoln from March 23-25, 2018. SciComm conference is an effective communication tool in science.

(Continued on page 2)

It is difficult to start to think about the next school year, but just as this year flew by, so will our summer. We once again are looking forward to our continued partnership with the math organization NATM. Both organizations have been busy working on our fall conference for 2018. This year the conference will once again be held in Kearney at the Younes Conference Center. Please start to look at our website for additional information about the fall conference. We will be starting to ask for presentation proposals in the near future. I personally am looking forward to the next step of implementing our new standards and can't wait to see what amazing things our science teachers are doing in our state.

Jodi L. Bahr, President  
Harvard Public School



## NJAS NEWS

Spring is just around the corner and science research competitions are beginning. The six regional

science fairs will occur across the State of Nebraska. Each region will select six senior and six junior high projects to compete at the Nebraska Junior Academy Science research competition on April 19<sup>th</sup> at the University of Wesleyan Weary Center. The regional fairs bring brilliant young minds together with students and teachers to win various awards, establish new collaboration for future research and to make a host of new friends. The science research competition is designed to promote science and technology in Nebraska by providing incentives for students to apply creativity and critical thought to solutions of science, technology, engineering and mathematics problems. It offers an opportunity for students to meet, exchange ideas and discuss career possibilities with scientists and engineers from colleges and industries. Each student will develop a scientific project, write an abstract of the project and give an oral presentation of the project the day of the fair. Students can win awards and scholarships.

Other science competitions that students can enter is the ISEF affiliated fairs at the University of Nebraska Technical Agriculture in Curtis and Nebraska City, Google Science Fair, Broadmasters for Junior High and the Junior Science & Humanities Symposium in Stillwater, OK.

Randall Lienemann  
NJAS President

## NJAS AT AJAS



Nebraska Students and Sponsors that attended the NAAS/AJAS Conference

Nebraska had eleven students attend the NAAS/AJAS annual conference February 14-18<sup>th</sup> in Austin, Texas. These students were the overall winners in the senior high division at the State Science Fair last April. The students toured many departments at the University of Texas, breakfast with scientists, presented their research in a poster, round table or oral presentation sessions. They attended the Plenary Lectures about the International Space Station, A Laboratory In Space and The Chan Zuckerberg Initiative: Accelerating Science. The students were inducted as fellows of AJAS. It was an educational and wonderful experience for everyone.

## MAIBEN LECTURER ANNOUNCED



**Thomas Clemente**

Eugene W. Price Professor of Biotechnology  
University of Nebraska-Lincoln  
Dept of Agronomy & Horticulture  
Center for Plant Science Innovation

Tom received a BS degree in Biology with a minor in Chemistry from the Indiana University of Pennsylvania in 1985. He earned an MS degree in Plant Pathology from Oklahoma State University in 1989 and a Ph.D. in Plant Pathology from North Carolina State University in 1993. Following his doctorate program he did postdoctoral training at Monsanto Company from 1993 to 1996. Tom

currently serves as the Director of the University of Nebraska's Plant Transformation Core Research Facility, where he holds a joint appointment within the Department of Agronomy & Horticulture and the Center for Plant Science Innovation.

Tom has over 25 years of experience in plant transformation technologies. His program has established an agriculture biotechnology pipeline at the University of Nebraska-Lincoln, which enables researchers to evaluate transgenic events from the bench to the field with procedures emphasizing identity preservation and stewardship of the biologicals. This infrastructure was instrumental during the development of the dicamba tolerance technology, currently marketed as Roundup Ready Xtend cropping system. His program is currently actively engaged in a number of transdisciplinary, multi-institutional team-based projects, targeting feedstock development for sustainable aquaculture feeds, designing genetic approaches to protect yield from both biotic and abiotic stresses along with enhancing phenotypic outcomes of C4 grass feedstocks for the bioeconomy.

## MEMBER SURVEY NOW ONLINE

NAS/NATS would love to hear from you!

Please visit the website and complete a short survey. Questions included how NAS is doing as an organization, how NAS can better benefit you (the member), your experience at past annual Spring meetings, and your opinion on future ideas for the annual Spring meeting. Please take a few minutes to voice your opinion. All thoughts and suggestions are welcome!

A direct link to the survey can be found by [CLICKING HERE](#).

## DATES TO REMEMBER

Officers Ballot Postmark Date – April 13, 2018  
NJAS Spring State Science Fair – April 19, 2018  
NAS Spring Annual Meeting – April 20, 2018  
State Science Olympiad – April 21, 2018  
NATS/NATM Fall Conference – September 20-22, 2018

## NAS ANNUAL SPRING MEETING

Please join NAS for the 128<sup>th</sup> annual meeting and awards reception! The 2018 Annual Spring Meeting is scheduled for April 20, beginning at 8:00am, at Nebraska Wesleyan University. This spring meeting is an excellent opportunity for students to present their research to their peers as well as provide a networking opportunity for faculty and students. The student abstracts are published in a

Proceedings which is available to libraries and published online. Additional workshops and round-table discussions will occur at this year's event that you don't want to miss!

[CLICK HERE](#) to register for the 2018 NAS Annual Spring Meeting! The registration and cancellation deadline is [April 11, 2018](#). Registration and payment can also be completed by using the enclosed form.

**New this year:** the complete Proceedings book will be made available online ONLY. Programs with a timeline of events will be available during the Annual Spring Meeting and can be printed from the website beforehand. If you would like to order a hard copy of the complete Proceedings book for a small fee of \$5, please contact NAS, [nebacad@unl.edu](mailto:nebacad@unl.edu) or 402-472-2644, to place your order.

A block of hotel rooms near Wesleyan campus have been made available to Annual Spring Meeting attendees. Please use the contact information below to reserve your room today.

New Victorian Suites  
225 N 50<sup>th</sup> St  
Lincoln, NE 68504  
402-464-4400

Rate: \$69.99- \$79.99 per night  
Mention: NAS Spring Meeting

*Deadline to reserve your room is April 1, 2018!*

## LEARN TO PRINT 3-D MODELS



Are you considering adding tangible interactive models to your class, but don't know where to begin? Have you heard about 3-D printing but don't know what it is, or haven't given it much thought for your classroom? Are you unsure about the potential of this cutting-edge technology? Does 3-D printing sound exciting, inspiring, daunting, and unattainable all at the same time?

If you answered yes to any of these questions, the following workshop is for you: During the 2018 NAS Annual Meeting, we will host a workshop that outlines some of the possibilities of 3-D printing for the science classroom. We will compare models that mimic metabolic structure to anatomically accurate models. We will introduce you to easy-to-use programs you will need to build the models. We will even walk you through designing a model for 3-D print, from start to finish. Through this workshop, it is our goal to break down barriers to 3-D printing, making this innovative technology accessible for you and effective for your classroom.

To attend this workshop, please RSVP to [nebacad@unl.edu](mailto:nebacad@unl.edu) or 402-472-2644. Be sure to bring your laptop to the workshop!

## NATS/NATM FALL CONFERENCE

The 2018 NATS/NATM Fall Conference is scheduled for September 20-22, 2018, in Kearney, NE. A Call for Proposals will go out very soon! If you have a session you'd like to propose for this year's event, please [WATCH THE WEBSITE](#) for the Call for Proposals to open and get your session submitted!

## NATS PERSONAL LEARNING NETWORK

Are you familiar with the NATS PLN webinars? They're currently offered monthly and are free to members. A wide range of topics are discussed and wonderful resources are made available to you. [CLICK HERE](#) to view the schedule, future topics, and webinar log in information. Past webinars are available to members on the [PLN archive page](#). Don't miss the next PLN webinar, which will discuss teaching resources, on April 9, 2018!

## PIE GRANTS REPORT

9 first quarter 2018 PIE grant applications were received and processed in mid-February. Applicants include the Nebraska Wildlife Federation – Nebraska's Climate Future for Civic and Business Leaders; College of Saint Mary – Native American Art and the Emerald Ash Borer; Lincoln Earth Day 2018; Keep Omaha Beautiful – Only Rain Down the Storm Drain; Nebraskans for Civic Reform – Campus Field Guide; Cook Grow Sew, LLC – Soil Life Education; What is Hidden Beneath our Feet; Audubon's Nebraska Crane Festival; Willa Cather Foundation – Pollinator Workshop; and Foundation for Lincoln Public Schools – Spark Summer Learning. Recipients were the Lincoln Earth Day 2018, Keep Omaha Beautiful, Nebraskans for Civic Reform, and Audubon Nebraska.

The Nebraska Environmental Public Information and Education MiniGrant Program awards MiniGrants of up to \$3,000 each, 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. The grant expands dialogue on important current conservation topics and provides information on emerging or highly useful conservation methods. All Nebraska individuals, private organizations, and public entities are eligible to apply for these funds.

The Nebraska Legislature created the Nebraska Environmental Trust in 1992. Using revenue from the Nebraska Lottery, the Trust has provided over \$250 million in grants to over 1,700 projects across the state. Anyone – citizens, organizations, communities, farmers and businesses – can apply for funding to protect habitat, improve water quality and establish recycling programs in Nebraska. The Nebraska Environmental Trust works to preserve, protect and restore our natural resources for future generations. <http://www.environmentaltrust.org/>

Second quarter 2018 applications are due April 13, 2018.

Grant forms and information can be found on our website by [CLICKING HERE](#).



## AAAS AWARDS & PRIZES

AAAS Awards and Prizes recognize significant contributions to science and the public's understanding of science in public engagement, journalism, diplomacy, research, public service and more. [CLICK HERE](#) to learn more about the range of categories and submit your nomination today!

The Nebraska Science News is a publication of the Nebraska Academy of Sciences, a private foundation associated with the American Association for the Advancement of Science.  
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