

Nebraska Science News



Nebraska Academy of Sciences



Nebraska Association of Teachers of Science

Serving Scientists and Science Educators Across the State of Nebraska

Winter, 2017-2018

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FROM THE NAS PRESIDENTS' DESK

Fall is an exciting time of the year. This year is no different. Campuses and schools are bustling with activity, as the fall semester is nearly halfway over. Change is also in the air; fall colors are coming in full display, and the days are getting shorter while the nights much cooler. In the world of science, fall is the time when the exciting announcements of the Nobel Prize winners are made. This year's prizes were particularly exciting. Both the Nobel Prizes in Physics and Medicine went to discoveries that explained phenomena that were proposed or observed over a century ago. Rainer Weiss, Barry C. Barish and Kip S. Thorne shared the Nobel Prize in Physics, for their decades-long work that proved Einstein right; that gravitational waves exist. The winners of the Nobel Prize in Chemistry, Jacques Dubochet, Joachim Frank and Richard Henderson, developed cryo-electron microscopy, a new way to get high-resolution images of biomolecules in solution. And finally, Jeffrey C. Hall, Michael Rosbash and Michael W. Young shared the Nobel Prize in Medicine for their discoveries of the molecular mechanisms controlling our inner clock: circadian rhythms. Their work explains how our bodies and those of other organisms are in sync with the rotation of our planet and day/night shift, an observation originally described by Jean Jacques d'Ortous de Mairan in mimosa plants in the eighteenth century. These are great examples of how hypotheses that at one point seem to be untestable can be tested once the technologies and tools are available to collect data, even if centuries later. To all budding Nebraskan scientists, let this be an example of how science can ultimately help us understand not just what happens, but the "how" and "why" behind natural phenomena or processes.

(Continued on page 2)

NATS PRESIDENT NEWS and VIEWS

As the first quarter for most of us is coming to an end, I would like to take some time to reflect on the 2017-2018 school year thus far. The school year has provided me with many memorable moments for me as an educator and personally. So far, we had the solar eclipse and participated in the NATS/NATM fall conference.

Many of us dream of having that one moment in time with our students, a moment that is difficult to put into words. I feel so fortunate that I got to have that moment in time with my students, the moment was on August 21, 2017 during totality of the solar eclipse. I personally had never experienced a solar eclipse and having the opportunity to share this with my students and colleagues was a once in a lifetime experience. When I got into education it was my hope that I would have at least one moment in my career that I felt like I had contributed to something bigger. Sharing the solar eclipse with my students and colleagues was in my opinion that one moment that I had hope to have in my career.

This fall we embarked on joining forces with the Nebraska Association of Teacher of Mathematics (NATM). The weekend of September 7-9, 2017 in Kearney, Nebraska provided a unique opportunity as both math and science educators from across the state came together to the fall conference. This year's conference was our first attempt at providing math and science teachers an opportunity to meet in a professional setting to discuss how we can help each other. By now many of you are aware that the new College and Career Ready Standards for Science were voted on and accepted this fall as well. The conference provided many educators the opportunity to dive into a better understanding of the standards. This fall has been an

exciting time to be a science educator in the state of Nebraska. I look forward to what the following months have in store for us.

Jodi L. Bahr, President
Harvard Public School

Continued from page 1 - From the NAS President

This fall has also brought a lot of environmental chaos and resulting heartbreak to the world. Among those are the three major hurricanes that hit the USA. In India, Nepal and Bangladesh, over 40 million people were affected by flooding due to the worst monsoon season in 40 years. Deadly fires have raged in California. These extreme weather events bring climate change to the forefront of many discussions in Nebraska and all over the world. Although no isolated event can be explained by climate change, scientists all over are interested in investigating if fingerprints of climate change can be discerned in these extreme weather events. I am a molecular scientist trying to understand some of the scientific evidence in this area. I hope all of you will take a look at the large amount of data that supports climate change and the implications for our planet.

As I was perusing the Internet to learn more about climate change science in Nebraska, I learned about many interesting and innovative projects highlighted this fall. Go check them out yourself! A study from UNL and the Nebraska Game and Parks Commission has found, by analyzing data collected since 1942, that migration patterns of Whooping Cranes have been affected by climate change. The end result is that these beautiful endangered birds are now migrating earlier in spring by as much as 22 days and later in the fall by up to 21 days. Their overall numbers are on the rise, from 16 in 1941 to 431 in 2016/2017. However, with changes in their migration patterns, the concern is that they may get caught in a late spring or an early fall snowstorm making it difficult for the migrating birds to find food. It's important to continue to study their migration patterns in the context of climate change. Another group of scientists led by Adam Houston and Carrick Detweiler from UNL, was hard at work on August 21 when many of us had our solar glasses on and were watching the eclipse. The data collected by the group will help their study focused on understanding how the atmosphere responds when it is perturbed in a significant way. Although not directly related to climate change per se, this type of data could allow for better predictions of the possible effects of disasters from very severe weather to a nuclear attack.

Climate literacy is also a focus in Nebraska. A recently funded project led by Cory Forbes at UNL is aimed at boosting climate literacy by developing an online tool focused on climate modeling for the K-12 curriculum. Weather models were brought to the forefront this fall

when the paths of the major hurricanes were continuously analyzed in the news. On another front, the applied climate science group at UNL's school of Natural Resources has taken a proactive approach to understanding and assessing climate change implications for Nebraska, as is chronicled in several publically available reports on the UNL School of Natural Resources webpage. A very different take on climate change comes from Creighton University thespians, who tackle climate change in their Theatre for Social Justice Course. Their work will culminate in a performance on November 17th, as part of the 2017 edition of Climate Change Theatre Action, a worldwide effort to draw attention to climate change. They will also take this performance to multiple high schools in Omaha. Also at Creighton University, John Schalles has been part of a long-term study of the salt marches at Sapelo Island, Georgia, where satellite data has shown a 35% percent decline in marsh biomass over the last 30 years. At UNO, the Barbara Weitz Community Engagement Center offers another venue to learn more about climate change and the environment. It sponsors visits by experts and events such as the upcoming screening of "Normal is Over The Movie" on October 30th. This is an award-winning documentary by Renee Scheltema on the big picture of what is happening to earth through an environmental lens, with hopeful suggestions of how we can take positive practical actions to conserve our beautiful planet.

I have only highlighted a few of the science projects and events related to climate change in Nebraska this fall. There is much more on this topic and a wealth of other exciting science happening across the state. Please take some time to explore what is happening in your nook of the state!

In closing, I want to take a few moments to share with you that Cecelia Dorn has informed me of her plans to retire from her position as our Academy's Executive Secretary. There are certain people and positions where one wishes for them to never retire - Cecelia is among those for me and the Academy. When I joined as President of our Academy in May of this year, Cecelia took me under her wing to educate me on the ins and outs of this Academy. She has served the Academy since the spring of 2000 and in my opinion is a big part of the Academy's successes. On behalf of our Academy family, I would like to thank Cecelia for her dedication, her hard work, and the impact she has had in her nearly 20 years of serving NAS. She will be deeply missed. Cecelia, we congratulate you on your impact and wish you well on this new chapter in your life!

Karin van Dijk, NAS President
University of Nebraska-Lincoln



NJAS NEWS

Nebraska Students will be attending AJAS conference

The American Junior Academy of Science is honored to welcome Nebraska delegates, their teachers, parents and the Nebraska Academy of Science representatives to the AJAS/NAAS/AAAS conference February 14th-18th, in Austin Texas. AJAS is America's only honor research society for high school scientists. Each Affiliated state's Academy of Science selects the premier middle and high school researchers from their state to be lifetime fellows in AJAS. Each year, AJAS hosts a conference to honor these students and to induct them as fellows into AJAS. The conference is always held in conjunction with the American Association for the Advancement of Science's (AAAS) Annual Meeting.

Nebraska has eleven students that will present their research in a poster session at this conference. These students were the overall winners at the State Nebraska Academy of Science Fair last April. The AJAS conference will host some of the nation's most talented high school student researchers for a "Breakfast with Scientists" held in conjunction with the 2018 annual meeting of the American Association for the Advancement of Science in Texas.

The breakfast will be a unique opportunity for students to receive advice and encouragement from scientists working at the top of their fields, among them the Nobel Prize laureates. Discussions will range in topic from what it means to be a scientist today to career paths to fundamental research. In today's world, science, engineering, mathematics, and technology (STEM) is an incredibly important role in sustaining the wellbeing of science research. It is especially critical to maintain leadership in the STEM fields as those nurture innovation and serve as the engine of modern society.

The new STEM state standards are designed to promote science, technology, engineering and mathematics in Nebraska by providing incentives for students to apply creativity and critical thought to solutions of science. It brings brilliant young minds together to create a research project that can compete for and win various awards, establish new collaboration for future research, and discuss career possibilities with scientists and engineers from colleges and industries. Students will develop a scientific project, write an abstract, and give an oral presentation the day of the fair. Nebraska has six regional research fairs throughout the state that host a science fair. Each regional fair will select six senior high and six junior high projects to compete at the state level on April 19th at Nebraska

Wesleyan University. Students can win many awards, medallions and scholarships. To view the dates of Nebraska Science Research Fairs and other information online go to www.nebraskajunioracademyofsciences.org.

Randall Lienemann
NJAS President

NJAS Regional Science Fair Details

Central – March 3, Hastings College, Hastings, NE
Contact: Neil Heckman, nheckman@hastings.edu

Eastern – March 10, Omaha Henry Doorly Zoo, Omaha, NE;
Contact: Chris Schaben, chris.schaben@ops.org

Northeast – April 6, Wayne State College, Wayne, NE
Contact: Adam Davis, addavis1@wsc.edu

Panhandle – March 6, Harms Advanced Technology Center, Scottsbluff, NE
Contact: Lisa Myles, lmyles@esu13.org

Southeast – February 2, Nebraska Wesleyan University
Contact: Julie Thomas, julie.thomas@unl.edu

Western – February 26, Nebraska College of Technical Agriculture, Curtis, NE
Contact: Dan Widick, widick@unl.edu

ACADEMY WEB SITE UPDATES

The NAS/NATS website is being renovated!

If you haven't checked it out recently, the NAS/NATS website has been undergoing some changes. Most of the work has involved cleaning up the pages and removing unused portions of the site. In the coming weeks we will be looking at adding features, updating the graphics and redesigning the layout.

If you have thoughts about the website, we would like to hear them. Fill out the survey at: <https://goo.gl/sMwbx5>

DATES TO REMEMBER:

PIE Grant 1st Quar 2018 App Deadline – January 5, 2018
Collegiate Scholarship Deadline – February 1, 2018
Presenter Abstract Due Date – February 5, 2018
High School Scholarship Deadline – March 1, 2018
NJAS Spring State Science Fair – April 19, 2018
NAS Spring Annual Meeting – April 20, 2018
State Science Olympiad – April 21, 2018

NAS SPRING ANNUAL MEETING

The Nebraska Academy of Science spring annual meeting will be held April 20, 2018. Abstracts may be submitted on line this year and payment via pay-pal is available. Abstract submission and registration will be available on line sometime after November 1, 2017. Watch for updates on our website. This spring meeting is an excellent opportunity for students to present their research to their peers. These abstracts are published in a Proceedings which is available to libraries and on-line all over the world. Call for Papers and Section Chairs are detailed later in the newsletter.

PIE GRANTS REPORT

NAS has been approved to administer another three year grant cycle for the Nebraska Environmental Trust Public Information and Education Minigrant program. We are honored to be able to continue this very worthwhile program which provides small grants up to \$3000. These grants 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.

NAS received 9 applications for the fourth quarter of 2017. Grant recipients will be announced in December. Applications were received from Lincoln Parks and Recreation-Pioneers Park Nature Center Signage; Green Bellevue-Building Capacity for Recycling and Waste Reduction; Nebraska Community Foundation-Rainwater Basin Joint Venture Informational Seminar; City of Lincoln Watershed Management Division-2018 Rain Barrel Workshop; Tri-Basin Natural Resources District-Prescribed Burn Communication Radios; Education Service Unit #5 – Nebraska Giganto Map-Not Just for Social Studies; Southern Heights Food Forest-Improving Soil Health by Managing Groundwater; Saving Grace Perishable Food Rescue-Perishable Food Pipeline Project; and the Grand Island-Kearney-Hastings Visitors Bureau-Wildlife Viewing Guide Campaign.

The Nebraska Legislature created the Nebraska Environmental Trust in 1992. Using revenue from the Nebraska Lottery, the Trust has provided over \$265 million in grants to over 2000 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>

First quarter 2018 applications are due January 5, 2018.

Grant forms and information can be found on our website, www.neacadsci.org. Click on NAS and then click on Grants and Scholarships.



SCHOLARSHIPS

[Collegiate Scholarship](#) deadline is February 1, 2018. You can download the form on the website at any time. Teacher recommendations are needed as well as a nomination from an Academy member. There will be two \$1500 scholarships offered to juniors or senior in college. Money will be paid in two installments during the 2018 – 2019 school year.

[High School Scholarship](#) deadline is March 1, 2018. There are five scholarships available this year, from \$100 to \$1000.

Again you can check the website for links to the scholarship forms.

NATS/NATM FALL CONFERENCE HIGHLIGHTS

The NATS/NATM Joint Fall Conference was a great success. We are planning to hold joint conferences the next two years, again at the Younes Conference Center in Kearney, NE. The 2018 conference will be September 20 – 22 and for those of you who really like to plan ahead we will meet September 19-21, in 2019.

We had just over 500 in attendance at the conference this year. Great presentations, speakers, and time for networking were available to those in attendance.

Highlights included STEM presentations, and information on the new STEM state standards, great vendor participation, an awards luncheon, and ice cream bar. New officers, retiring officers, and award recipients can be found on page 6-8.

FAREWELL TO MARTHA KAUL



Martha Kaul was Office Manager for the Nebraska Academy of Sciences from 1997 – 2000 and trained Cecelia Dorn for the job in April of 2000. Martha was a detail person and extremely knowledgeable about NAS, Nebraska, and the environment. Her generosity with her time and talents was well known to friends and neighbors. Celia once mentioned that after having lunch with Martha her mouth hurt from smiling and laughing so much. She will be greatly missed.

Martha (Naugler) Kaul was born in Hudson, New York, on February 26, 1952, and died in Lincoln, Nebraska on October 19, 2017. As a young girl, she lived with her parents, Warren and Virginia Naugler, and brother James in various New England states and Wisconsin and Tennessee. She graduated with degrees in botany from the University of Maine at Orono and the University of Nebraska-Lincoln. In Nebraska, she held various business and agriculturally related jobs. She supported state and national environment and charitable organizations and distributed food and clothing to the needy. She loved gardening and athletics. She has many friends in Nebraska, and every summer she met with high-school friends at various places on the east coast. In 1976, she married Robert B. Kaul in Lincoln, Nebraska, and they travelled across the country as well as to Europe, Australia, New Zealand, and Central America. She is survived by her husband, Robert, of Lincoln; her mother, Virginia Naugler, of Bloomfield, Connecticut; her

brother, James Naugler and wife Rebecca, of La Crosse, Wisconsin; and by three brothers-in-laws and wives. She was thrilled by Nebraska's clouds and sunsets. A memorial service will be held for her in Minnesota at later date.

Other Links and Opportunities





NOAA/NASA SciJinks
SpacePlaceConnect@jpl.nasa.gov

NASA Space Place
[October Articles](#)

[National Youth Science Camp](#)
[Application Information](#)

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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NJAS Acting President: Randall Lienemann
NAS Executive Secretary: Cecelia Dorn
Nebr. Sci. News Editor: Cecelia Dorn
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E-mail: nebacad@unl.edu Telephone: (402) 472-2644
Website: www.neacadsci.org Donations are tax deductible.

The Nebraska Association of Teachers of Science is proud to announce the election of their newest board members. Congratulations, to

	<p>NATS President-Elect Betsy Barent 8th Grade Science Teacher and Middle School Department Head, Norris Middle School, Firth, NE</p>
	<p>NATS Secretary Tim Hagge Instructor Biological Sciences, Louisville High School</p>
	<p>NATS Board Member At Large Rachel Burns Advanced Placement Environmental Science, Honors Anatomy & Physiology, Plants & Propagation, Horticulture & Landscaping Teacher, Omaha Northwest High Magnet School</p>
	<p>NATS Board Member At Large Jennifer Swerczk Education Specialist, Nebraska Public Power District, Norfolk, NE</p>

Thank you to the retiring board members

	NATS Retiring Past President Lee Broggie
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Presidential Award Nominees



Left to Right

Arnold Tolero, Betsy Barent, Paul Timm, Gregory Sand (math 2015 national awardee), Pam Peterson, Sherri West, Alicia Davis


Cherrie Kerr was the other math finalist but I believe she did not attend due to having a baby.

	Betsy Barent 8th Grade Science Teacher and Middle School Department Head, Norris Middle School, Firth, NE
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	<p>Pam Peterson Middle School Science Teacher at York Middle School</p>
	<p>Paul Timm Secondary Science Teacher at Lyons-Decatur Northeast in Lyons, NE</p>

Catalyst Award Winners

Catalyst awards are given to individuals that have promoted science education in the state of Nebraska.

	<p>Formal Educator Catalyst Winner Sally Harms Professor of Science and Science Education at Wayne State College</p> <p>Sally has been a loyal member of NATS for over 30 years and served as a NATS president, an NSTA District Representative, and an NSTA district director. You will find many preservice teachers following Sally throughout the conference and we are grateful for her leadership in bringing these young teacher into the profession. Thank you Sally for you dedication to science education.</p>
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**Informal Educator Catalyst Winner
Michael Sibbernsen
Lecturer of Astronomy at the University of
Nebraska-Lincoln**

Before working at the university, he was the Science & Technology Coordinator for the Strategic Air & Space Museum, and before that, the Outreach Coordinator for the NASA Nebraska Space Grant office in Omaha. Over the years Michael has traveled throughout Nebraska performing hundreds of high energy hands-on science demonstrations for students of all ages. Michael has appeared on national television, and was for some time, a regular fixture as “the science guy” on a local morning talk show in Omaha. Many of you know Michael as the guy with the cool telescopes at the NATS star parties. Thank you Michael for all you have to promote science in Nebraska.



THE NEBRASKA ACADEMY OF SCIENCES, INC.
(Founded January 30, 1880)
128th ANNUAL MEETING TO BE HELD
at
NEBRASKA WESLEYAN UNIVERSITY
50TH and ST. PAUL, LINCOLN, NEBRASKA

FRIDAY, APRIL 20th, 2018

"Call for Papers"

**ABSTRACTS, FORM, AND FEES ARE DUE TO SECTION CHAIRPERSONS
FEBRUARY 5, 2018**

Individuals are invited to submit an abstract of original research or synthesis of primary research/literature for consideration by one of the sections for inclusion in the Program of the Annual Meeting of the Nebraska Academy of Sciences. You may also complete your presenter registration on line using the Events tab on the NAS website. Be advised if your abstract contains any special characters or formulas you may be requested to submit a hard copy as well.

Annual Meeting Presenters may also want to consider submitting their complete research articles for review and possible publication in the Transactions of the Nebraska Academy of Sciences. Papers from all sections are eligible. Contact the Academy office for publication information.

Section chairs will forward all documents they receive to the Academy, nebacad@unl.edu by February 19th. Any online registrations will be shared with the section chairs so they can complete their program schedule.

To register online go to <https://nebraskaacademyofsciences.wildapricot.org/page-1228210>

or contact

THE NEBRASKA ACADEMY OF SCIENCES
302 MORRILL HALL, 14TH AND 'U' STREETS,
LINCOLN, NE 68588-0339
TELEPHONE (402) 472-2644
FAX (402) 472-8899

EACH ABSTRACT MUST BE ACCOMPANIED BY A \$70.00 REGISTRATION FEE (\$15.00 FOR STUDENTS—COPY OF VALID STUDENT ID MUST BE ENCLOSED) FOR THE PERSON PRESENTING THE PAPER. PLEASE COMPLETE CONTACT INFORMATION ON THE REGISTRATION FORM OR ON LINE ACCURATELY AND LEGIBLY. FORM IS AVAILABLE ON OUR WEBSITE: <https://nebraskaacademyofsciences.wildapricot.org/NAS>

- 2. MAKE CHECKS PAYABLE TO THE NEBRASKA ACADEMY OF SCIENCES or NAS.**
- 3. AUTHORS SUBMITTING MORE THAN ONE ABSTRACT SHOULD PAY ONLY ONCE.**



2017-2018 NEBRASKA ACADEMY OF SCIENCES PROGRAM COMMITTEE

Area code 402

Section	Chairperson	Address	unless listed
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Aeronautics & Space	Scott Tarry Michaela Lucas	NASA NE Space Grant, 6001 Dodge St, CB 041, Omaha 68182-0589 mlucas@unomaha.edu	554-3772 O
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Applied Sci & Technol	Mary Ettel	Wayne State College, 1111 Main St, Wayne, 68787 maettel1@wsc.edu	375-7342 O
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General Physics	Adam Davis	Wayne State College, 1111 Main St, Wayne, 68787 addavis1@wsc.edu	375-7339 O
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Teaching of Science & Mathematics	Josef Kren	Bryan LGH Health Sciences, 5035 Everett, Lincoln 68506 josef.kren@bryanlgh.org	481-4968 O
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Collegiate Academy (Biology)	Therese McGinn	Olin Hall of Science 208, NE Wesleyan 5000 St Paul Ave, Lincoln, 68504 tmcginnn@nebrwesleyan.edu	465-2457 O
(Chemistry/Physics)	David Treichel	NE Wesleyan Univ., 5000 St Paul, Lincoln 68504 dat@nebrwesleyan.edu	465-2260 O
	Nathaniel Fackler	nfackler@nebrwesleyan.edu	465-2260 O
Local Arrangements Chair	Bob Fairchild	NE Wesleyan Univ., Physics Dept, Lincoln 68504 rwf@nebrwesleyan.edu	465-2253 O
Academy Exec Secretary	Cecelia Dorn	302 Morrill Hall, 14th & U St, Lincoln 68588-0339 nebacad@unl.edu	472-2644 O

NAS ANNUAL MEETING, APRIL 20, 2018
NEBRASKA ACADEMY OF SCIENCES ABSTRACT INSTRUCTIONS ABSTRACTS
DUE FEBRUARY 5, 2018 TO YOUR SECTION CHAIR

Email or MAIL TO YOUR SECTION CHAIRPERSON or Complete the on-line presenter registration form

1. *YOUR ABSTRACT, INCLUDE 1 HARD COPY OR WORD AND PDF ELECTRONIC FILES (so editor can proof scientific notation)*
2. *COMPLETED PRESENTERS REGISTRATION FORM & FEE*

GENERAL INSTRUCTIONS

DEADLINES: ABSTRACTS, REGISTRATION FORM AND FEES must be received by the Section Chairperson(s) on or before **FEBRUARY 5, 2018**. Late submissions may not appear in the printed program.

PREPARING THE ABSTRACT: Abstracts should be informative condensations of the essential parts of the paper; not merely recitation of the subjects to be covered in the presentation. Since *the abstracts receive international distribution by our utilization of abstracting services and a journal exchange program, please proofread your work carefully.*

Please use Times New Roman, 12 pt. Type single-spaced. Margins should be Top 0.5", Bottom 0.5", Left 1.0", and Right 0.5".

Type the TITLE in CAPITAL LETTERS. Type Name, Department, Institution, City and Address on the line immediately below the Title, indenting 5 spaces (one tab). Leave exactly one line between this material and the BODY of the Abstract. (See sample below.)

<p style="text-align:center">CHARACTERIZATION OF THE SITE OF NORA VIRUS REPLICATION IN <i>DROSOPHILA MELANOGASTER</i> Justin Buchanan, Brad Ericson, Darby Carlson, and Kimberly Carlson, Department of Biology, University of Nebraska at Kearney, NE 68849</p> <p style="text-align:center">Nora virus is a picorna-like virus that infects <i>Drosophila melanogaster</i>, but displays no apparent pathogenicity. The mode of</p>

Please save your abstract in Microsoft Word and submit it (by email, CD or jump drive), together, with one hard copy of the abstract (or a PDF file), registration form and fee **TO YOUR SECTION CHAIRPERSON**. OR REGISTER ON LINE HERE.

PLEASE PROOFREAD YOUR WORK!!

PLEASE NOTE: Each abstract is to be accompanied by a completed registration form and \$70.00 registration fee for the PRIMARY PRESENTER; (includes membership). If there are multiple authors, registration fees are required for only those who attend the Annual Meeting. If the presenter is a student who encloses a copy of his/her current I.D. with the registration, the fee is \$15.00. (If an individual is presenting more than one paper, only one registration form and fee is required.)

**PRESENTER'S REGISTRATION/SECTION FORM NEBRASKA ACADEMY OF SCIENCES
DUE FEBRUARY 5, 2018 TO SECTION CHAIR
SEND REGISTRATION FORM, PAYMENT AND ABSTRACT TO YOUR SECTION CHAIRPERSON.
REGISTRATION IS REQUIRED OF ALL WHO PRESENT PAPERS OR ATTEND/CHAIR ANY SESSION**

REGISTRATION Please print or write legibly

Name _____

Mailing Address _____

Institution _____

E-mail address: _____

Phone Number: _____

Speaker: _____

Time Required: 5-10 min. _____ 10-15 min. _____ 15-20 min. _____

Section in which paper is to be presented (Check one)

____ AERONAUTICS & SPACE SCIENCE – mlucas@unomaha.edu

____ ANTHROPOLOGY – <mailto:wbabchuk1@unl.edu>

____ APPLIED SCIENCE & TECHNOLOGY – maettell@wsc.edu

____ BIOLOGICAL & MEDICAL SCIENCES –
annemarieshibata@creighton.edu

CHEMISTRY & PHYSICS

____ CHEMISTRY SECTION – jdarr@unomaha.edu

____ PHYSICS SECTION – addavis1@wsc.edu

Plan your AUDIO VISUAL NEEDS carefully and indicate the LENGTH OF TIME REQUIRED for your presentation by circling the appropriate item above. The allotted time is at the discretion of the Section Chairperson, and if a special time slot is needed, be sure to indicate your needs. This is essential for accurate scheduling.

Equipment Provided: PP equipment. Other equipment: Confer w/ your section chair, any special set-up must be completed before the session begins, no additional time between speakers is allotted for set-up.

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Student \$10.00 _____
(with copy of student ID)

REGISTRATION

General & Presenter Registration \$70.00 _____
(dues included)

Student Presenter Registration \$15.00 _____

Lunch \$ 7.95 _____

Check _____ Cash _____ Credit Card: Visa _____ MC _____ Discover _____

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____ CHEMISTRY/PHYSICS SECTION – dat@nebrwesleyan.edu

Questions ??? Contact:

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