Greetings from the NAAS President

Amanda Fuller, NAAS President and Executive Director of the Kentucky Academy of Science

It is my honor to serve as NAAS President during this important time of transition for the organization. My main goal as a leader is to keep building our scientific community of state & regional Academies of Science. I see many possibilities ahead for NAAS and I’m thankful for the ideas and insights I’ve been getting from YOU -- my fellow Academy leaders. Meeting and learning from you is my favorite part of this leadership role.

It’s reassuring to know that we face many of the same challenges, and encouraging to see that we can help each other navigate them. I know that in many of our states, we are the standard-bearers for science. We are each advocating and educating and innovating, and together we are identifying ways we can support each other in our missions to educate, advocate, and do more science.

In Kentucky, for example, I’ve been able to incorporate good ideas from some of our fellow academies, with as our Kentucky Science Speakers Bureau, and our Bench Talk Live virtual lecture series. I’ve appreciated and adapted other academies’ experience and advice on state policy work. Likewise, I’m following your leadership on diversity, equity and inclusion; on engaging your members; and in cultivating the next generation of scientists. I think this is how we build our capacity as a scientific community—by building on our successes, collaborating, and sharing solutions.

CONTINUED ON PAGE 2

2022 AAAS Annual Meeting Will Take Place face to face and Online Thursday – Sunday, February 17-20 in Philadelphia

This year’s meeting theme: “Empower With Evidence”

Susan G. Amara, Ph.D.
AAAS President

After a year of attending virtual convenings, we have come to appreciate many benefits, but we still long for the things that can only happen in person. As vaccinations increase, case numbers decline, and states, localities, and institutions begin the process of reopening, we are all left wondering what the newest “new normal” will look like. Like most scientific organizations, we are actively confronting these questions, especially as they relate to our 2022 Annual Meeting.

CONTINUED ON PAGE 4

Looking forward to a hybrid AJAS 2022

By Kelly Salmon, AJAS Director

In my role as a Scientist for the New Hampshire Academy of Science (NHAS), I have helped run research programs for middle and high school students for five years. For many of these students, their diligent work tackling scientific problems culminates in their attendance at the AJAS annual meeting.

When I first started preparing NHAS students for the AJAS, I was astounded at this wonderful opportunity for students to attend and present at a large scientific meeting. As budding scientists (either of the professional or citizen scientist variety), communicating knowledge to your peers is an essential skill. The experiences and conversations from the annual meeting inspire, educate, and plant seeds for the future.

CONTINUED ON PAGE 2

Why We Must Fund Science

We are seeing promising signs for science funding in 2022. The U.S. House of Representatives is proposing funding levels that call for large increases for several federal research agencies, which will further important initiatives such as climate research at NOAA and DOE, as well as expand public health research capacity at NIH. There is also bipartisan legislation that would double NSF’s budget over the next five years and grow its ability to support basic and applied research at universities.

CONTINUED ON PAGE 3
Looking forward to a hybrid AJAS 2022
(Continued from Page 1)

Looking forward to 2022, we are planning for a hybrid AJAS meeting coinciding with the hybrid AAAS meeting in Philadelphia and online February 17-20th. We will keep popular and effective online strategies like virtual posters for students to present their work. Early meetings can still occur, focusing on helpful topics like how to best present your research to a general audience. For students who are able to travel, there will be an in-person meeting with events such as tours that are difficult to replicate in an online format. The meeting may still look different than what we saw pre-pandemic, but I know the AJAS team will work to make it a memorable and rewarding experience for all involved. We have already begun the planning process and I look forward to sharing more with you in the future.

Of course, this year is a transition in multiple ways. Hopefully, we will be transitioning out of the pandemic mode that we have been living in for over a year and a half. The remote AJAS 2021 meeting was a great success and an excellent way to celebrate the students in such a strange time. Projectboard proved to be a great way for students to share their work with an even larger audience than AAAS. The students’ posters are still available for viewing at https://projectboard.world/ajas. Virtual events allowed for popular and busy guests like Dr. Francis Collins as well as presentations over a longer period of time than a typical meeting. The online format also enabled even more students to participate as AJAS delegates. However, many students (and many of the adults) missed all of the events and personal interactions associated with a normal meeting.

Each year, I have gotten more involved in the AJAS and I am now excited to take over the role of AJAS Director. The current strength of the AJAS is, in large part, because of the work and dedication of Lee Brogie (and Ed Brogie) for over fifteen years. I am personally grateful to Lee for this work and for agreeing to stay on board for another year to advise in the transition.

Kelly Salmon
AJAS Director
New Hampshire Academy of Science

Greetings from the NAAS President
(Continued from Page 1)

I’m excited about incorporating our collective knowledge, experience, and aspirations into a strategic plan that will guide NAAS to serve our academies better and strengthen our scientific community. I am thankful to my fellow board members for their commitment to this process. I hope you will contribute, and join us in what’s coming next!

Amanda Fuller
NAAS President
Executive Director, Kentucky Academy of Science
NAAS COMMITTEES 2021
Communications and AAAS Liaison
Don Jordan, (SC)
Preston MacDougall, (TN)
Amanda Fuller, (KY)
Peter Faletra, (NH)
Mandana Sassanfar, (AAAS)
Se Jeong, (VA)
Suzanne Thurston, (AAAS)

Junior Academy Committee
Kelly Salmon, (NH)
Elaine Faltera, (NH)
Lee Brogie, (NE)
Philip Winchell, (OH)
Michael Roche, (NJ)
Devon Thorsell, (WA)
Amanda Fuller, (KY)
Peter Faletra, (NH)
Michael Roche, (NJ)
Devon Thorsell, (WA)
Amanda Fuller, (KY)
Suzanne Thurston, (AAAS)

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Peter Faletra, (NH)
Nancy Martin, (KY)
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Amanda Fuller, (KY)

Development & Fundraising Committee
Amanda Fuller, (KY)
Mr. Ed Brogie, (NE)
Mike Woytek, (OH)
Michael Cohen, (WADC)

Nominations & Awards Committee
Amanda Fuller, (KY)
Michael Strauss, (NAAS) TX
Dr. Don Jordan, (SC)

Why We Must Fund Science
(Continued from Page 1)

At AAAS, we are asking our entire scientific community to call upon their elected officials to support this critical science funding. We are also empowering our members with the tools they need to make an impact. In particular, our Local Science Engagement Network (LSEN) has already helped hundreds of scientists find opportunities to advocate for science. I encourage you to join LSEN as a science advocate. When you add in your address on the website (https://lsen.quorum.us/sign_in), our system can connect you to your elected official, and you will be able to engage with them, be it by email, or Tweet. In the coming weeks and months you will see campaigns related to climate change and funding R&D that you will be able to participate in for starters.

It’s important to remember that advocating for funding is not just about funding scientists. This is about supporting creativity and innovation for everyone. On this note, next year’s Annual Meeting theme is “Empower with Evidence” and is focused on sharing the incredible power of evidence-based decision making while addressing the challenges of rebuilding public trust in science. While we plan to hold the meeting safely in Philadelphia from February 17-20, programming and scientific sessions will also be available in an entirely virtual setting, so stay tuned on our website for more details and ways to join us.

Sudip S. Parikh, PhD
Chief Executive Officer
Executive Publisher, Science Family of Journals

NAAS Affiliated Academies of Science
have the opportunity to become more involved
in NAAS and AAAS Affairs.
By Michael Strauss,
The following offices are up for election and NAAS is seeking nominations from the ranks of leadership within the 48 Affiliated Academies

(Three open positions)

NAAS Treasurer (3-year term)
NAAS Newsletter Editor (3-year term)
NAAS AAAS Representative (3-year term)

Non-Voting Members: (Positions Available)

NAAS Member-at-Large (A-Affiliated Academies) Each position carries a three-year (3 yr.) term.
NAAS Member at Large (B-Business) Each position carries a three-year term (3 yr.)
AJAS Member at Large (C-Junior Academies) Each position carries a three-year term (3 yr.)

Deadline for nominations will be at the final day of the AAAS Annual Meeting, Philadelphia, PA, February 16-20, 2022. The Assembly of Delegates usually meets and elects’ officers at and during the AAAS Meeting. However, AAAS will meet both in-person and virtually so to allow for maximum participation of delegates, the Assembly will convene virtually in early March (time/date TBD).

Please contact Nominations and Awards Committee Chair
Michael Strauss to place a nomination:
Dr. Michael Strauss, USDA (retired), 1056 Old Ranch Road, Crawford, TX 76638
michael_strauss1@hotmail.com or Cell: 240-676-7670
We write now to share with you some of the preliminary plans for the 2022 meeting, and to ask for your patience and understanding as we work to finalize some of the outstanding details in the months ahead.

• **Philly, here we come!** We invite those who are comfortable doing so to join us **February 17-20 in Philadelphia**. Our in-person experience will feature live Plenary Lectures, Topical Lectures, special programming, and great social and networking opportunities – all in a city that is ready to welcome visitors – safely – with open arms.

  Link to vaccination requirement for face to face Annual AAAS Meeting: https://meetings.aaas.org/vaccination-requirement-for-aaas-events/

• **Scientific Sessions will be virtual.** To ensure that as many people as possible are able to participate in the Scientific Sessions, they will be entirely virtual. Speakers can participate from wherever they feel comfortable, including Philly. Scientific Sessions will begin in January with the release of Spotlight Videos, which will prepare all meeting participants to engage in active discussion during the live panel sessions. For those who join us in Philly, we’ll have Community Viewing Pods where attendees can view the Scientific Sessions with friends and colleagues, enabling those spontaneous hallway connections and conversations that we’ve all missed.

• **A first-rate virtual experience.** Not able to join us in Philly? No problem! You’ll be able to participate in all of our Plenary Lectures, Topical Lectures, Scientific Sessions, and Workshops – live! – via a new and improved virtual meeting platform.

• **This year’s meeting theme "Empower With Evidence"** aims to inspire sessions that illustrate the transformative power of evidence-based discoveries and that address the challenges of rebuilding the public trust in science. Meeting registration will open in September.

The Annual Meeting team will continue to work tirelessly to create a convening that features compelling content, powerful professional development, and unparalleled networking opportunities in the safest possible settings.

We look forward to seeing you in Philly or online.

Sincerely,

Susan G. Amara, Ph.D.
President, AAAS
Chair, 2022 Annual Meeting
Fall 2021 Southern California Academy of Sciences (SCAS) Research Training Program (RTP) News…
- SCAS website: http://scas.nhm.org
- Contact email: scas.nhm@gmail.com

This 2021-22 academic year is another year of difficulties caused by the relentless Covid19 pandemic that continues to stress all in education as well as the special students in the SCAS RTP. Despite the restrictions of “in-person” learning, several Southern California students were also relentless in their pursuit of the unique opportunity to work with the guidance of a scientist (mentor) on a project of mutual interest, by submitting their SCAS RTP applications in June. In July the committee accepted the following eleven students and their projects into the 2021-22 SCAS RTP:

Alex Liu (10) University High School, Irvine, CA.
Humbolt: Bio-Inspired Hummingbird Aircraft
Ananya Bharathwaj (11) Westview High School, San Diego, CA.
Modeling Heparan Sulfate Sugar Released into Hippocampus During Septic Shock
Ananya Sriram (10) The Harker School, San Jose, CA
Predicting Heart Failure Risk and Severity in Hypertrophic Cardiomyopathy Patients via Gene Expression Analysis
Cyron Mandia (11) Dr. Richard A. Vladovic Harbor Teacher Preparation Academy, Wilmington, CA.
Early Life Adversity Provokes Acute and Long-Term Impairments in Learning and Memory
Doyoon Kim (12) Cleveland High School, Reseda, CA.
Developing Computational Models and Neural Networks for Identifying Neoantigens in Cancer Patients
Katherine Hua (10) Woodbridge High School, Irvine, CA.
Analysis of gene expression in glaucoma patients to identify viable genes for gene therapies
Kavya Gupta (11) Westview High School, San Diego, CA.
Calcium Diffusion in 3D Volumes of Dendritic Spines of Varying Ages
Sabreen Alam (12) Portola High School, Irvine, CA.
From Skin to Kidney: Transforming Cells via Direct Reprogramming
Su Kara (12) Capistrano Valley High School, Mission Viejo, CA.
Detection of an Endotracheal Tube Using Coord-Cov
William Huang (11) Palos Verdes Peninsula High School, Rolling Hills Estates, CA.
Enhancing the Bionic Eye: A Real-Time Video Optimization Framework to Encode Color and Spatial Information Into Retinal Prostheses
Ziyi (Zoe) Huang (11) Walnut High School, Walnut, CA.
Study on the recruitment of Ostrea lurida and Crassostrea gigas in Southern California to Promote Native Species

Students were given cautions to work within the mentor’s institutional guidelines developed based on covid-19 state of California and local guidelines. Normally a research training student and mentor begin their work in August/September, which involves the routine of working in the laboratories of their mentors in Southern California academic institutions, however due to the upsurge of Covid-19 in 2020, the subsequent unavailability of lab access, and to protect those involved, the program was modified to have the students work virtually with their mentors as much as possible. We hope in this 2021-22 academic year, there may be more “normal” situations allowing students to have their “hands on” investigative experiences.

As the year passes, we hope the virtual Saturday meetings could be held “in person” eventually leading to an “in person” May 2022 Annual Meeting of the SCAS. Our first virtual meeting, a “Meet and Greet” on September 25 will give students time to introduce one another and share their proposed research and mentor information. Mentors and parents are encouraged to attend. Other Saturday meetings will be mostly instructional. Professionals will teach students the necessary skills about writing and presenting scientific papers, both in oral and poster format, creating scientific posters, and unique to our program has been a thought provoking discussion of “ethics” in science after having read an “Introduction to Ethics” assignment. Before long, written papers and posters will be submitted for evaluation in preparation for the May, 2022 SCAS Annual Meeting, when the next group of AJAS delegates will be chosen.

In February, 2022, six students in the 2020-21 RTP will present their research at the national American Junior Academy of Science (AJAS) meeting to be held in conjunction with the February, 2022 (hybrid) American Association for the Advancement of Science (AAAS) Annual Meeting in Philadelphia, PA. We congratulate all of the following students for their outstanding papers and posters presented at the virtual SCAS Annual Meeting May 7, 2021: Aksh Garg, Palos Verdes Peninsula HS; Camilla Martinez, North Hollywood HS; Doyoon Kim, Grover Cleveland HS; Kavya Gupta, Westview HS; Michael Skibsted, Santa Margarita Catholic HS; Su Kara, Capistrano Valley HS.

Former RTP students (from as early as 1991) participated as moderators for the speakers in the 2020-21 SCAS Spotlight Lecture Series featuring Board members who spoke of their current research during four virtual presentations. In place of the 2020 Annual Meeting the Board initiated this series that can be accessed at the SCAS website: https://scas.nhm.org/ This series will continue during the 2021-22 year.

As we start this 41st year of the SCAS RTP, it’s hoped that our high school students will find an exciting year of “Discovery”… in interacting with other like minded individuals, in working with professionals guiding them in their research, and in developing a true sense, understanding and appreciation of the scientific process by working for nearly a year on a project of their interest.

Gloria J. Takahashi, SCAS Board Member SCAS RTP AJAS Director 1990-2000
Metric System Pioneer

In 1893, Thomas C. Mendenhall (1841–1924), a native of Hanoverton, Ohio, decided that the international meter and kilogram would be the fundamental length and mass standards for weights and measures in the United States. Mendenhall was then Superintendent of Weights and Measures for the U.S. federal government. His decision, known as "The Mendenhall Order," was a major departure from past United States policy of maintaining length and mass standards identical to the Imperial systems of weights and measures used in Great Britain. In that system, length was the English yard and mass the pound.

Mendenhall was a renowned scientist, appointed by President James Harrison as superintendent of the U.S. Coast and Geodetic Survey in 1889. He had been chairman of physics at Ohio State University, chief of the Instrument Division in the U. S. Signal Corps, and president of Rose Polytechnic Institute.

The Mendenhall Order redefined customary British-U.S. units in terms of metric units. The yard became 3600/3937 meter and the avoirdupois pound-became the mass of 0.4535924277 kilogram. The National Bureau of Standards (now the National Institute of Standards and Technology) used those same definitions from its founding in 1901 until 1959. In 1959, English-speaking countries agreed to define one yard as 0.9144 meter and one pound-mass as 0.45359237 kilogram.

Mendenhall did not need any new laws for the action because the metric system had been legal in the U. S. since passage of the Metric Act of 1866. It regarded metric units as the fundamental and internationally accepted standards for the United States.

President Harrison appointed Mendenhall director of the U.S. Coast and Geodetic Survey in 1889, and he served until 1894. The weights and measures office then was part of the geodetic survey. Mendenhall helped to determine the boundary line between the United States and Canada, including the boundary of Alaska. As a member of the International Electrical Congress, he also had a hand in defining basic units of electricity.

See The Ohio Academy of Science "Heartland Science" website

http://www.heartlandscience.org/energy/metsys
A Resolution to Adopt & Implement the Metric System in the United States

Whereas: the United States is the only developed nation that has yet to officially adopt the metric system; and

Whereas: foreign trade is hindered by nations that refuse to buy products made in the United States that aren’t built to metric specifications; and

Whereas: accidents concerning measurement mistakes and differences can be avoided if the United States adopts a system common with the rest of the developed world; and

Whereas: the mathematical and scientific industries of the United States use the metric system, and increased dependency on technology is causing a divide between technological and private sectors; and

Whereas: nanotechnology is now one of the standards in these United States. Using the conventional language of science, students need to be able to describe the size of a nanometer and make size comparisons of Nano-sized objects with other small objects. To accomplish this a student must be familiar with atoms, molecules, and cells. Students also need to have knowledge of basic units of the metric system and its prefixes and poses the ability to manipulate exponential and scientific notation and

Whereas: the metric system is easier to use than the customary system of measurement because of its simplicity and

Whereas: Children Learn Metric more readily: citing a study sponsored, the American Association for the Advancement of Science and

Whereas: attempts by other nations to switch to the metric system have ended successfully with little inconvenience to their citizens; and

Whereas: time in the classroom could be saved if the teacher did not have to teach two distinct systems of measurements and

Whereas: the United States government has supported attempts to adopt the metric system since the Treaty of the Meter in 1875 but has yet to put sufficient resources into this cause;

Therefore, be it resolved by the National Association of Academies of Science (NAAS) on this Twenty-Second Day in the Year of our Lord Twenty--Twelve that: the United States make a long term commitment to officially convert government, private sectors, and education K – 12 to the metric system.

Respectfully Submitted,
Board of National Association of Academies of Science
The Alabama Academy of Science
Will hold the 2022 Annual Meeting on the campus of Athens State University, March 16 – 18, 2022. For information, contact: Executive Director email: Kramlich@uab.edu

The Arizona-Nevada Academy of Science: PROMOTING STEM THROUGHOUT ARIZONA AND NEVADA. The ANAS membership dues support science education in Arizona and Nevada through awards, grants and scholarships for outstanding K-12 science teachers; and for high school, undergraduate, and graduate students. Contact: Permanent Secretary Dr. Pedro Chavez: pchave@midwestern.edu

The Arkansas Academy of Science helps Arkansas students obtain college degrees as well as support the advancement and diffusion of science in Arkansas. For information contact, President Dr. Stephen Addison, University of Central Arkansas, 201 Donaghey Ave., Conway, Arkansas 72035 email: saddison@uca.edu

In 1857, the Chicago Academy of Sciences was founded by nature aficionados and amateur scientists seeking a space where they could study and share the specimens they collected. On October 23, 1999, the Academy’s Peggy Notebaert Nature Museum officially opened, helping residents of urban Chicago to connect with the natural world. For more information, visit our website: http://www.naturemuseum.org or contact: info@naturemuseum.org

The Colorado-Wyoming Academy of Science: We are privileged to have honored you, your teachers, your parents, and your NAAS affiliated Academy of Science representatives at our Annual Meetings AJAS/NAAS/AAAS Conference. For more information, contact Dr. Doug Petcoff, President at petcoff@msudenver.edu or 303-556-3214.

The Delaware Academy of Science, Inc., based in Newark, Del., opened in 1968. We own and operate the Iron Hill Museum and Iron Hill Science Center, and work to promote science education in the First State. The board of directors of Delaware Academy of Science, Inc., as well as all the staff and volunteers at the Iron Hill Science Center and Museum are excited to announce the launch of DelawareScience.org as the online home of the Academy and all things related to the Iron Hill Science Center and Museum. The Science Center staff may be reached by phone at (302) 368-5703, or use our contact form at https://delawarescience.org/contact

The Florida Academy of Sciences, Inc. was founded in 1936 as a nonprofit organization. The Academy is the Florida Affiliate of the American Association for the Advancement of Science and is the only organization in Florida that represents all disciplines of sciences. For more information, contact our secretary, Dr. Norine Noonan via email, nnoonan@usfsp.edu or by phone, (727) 873-4793.

The Georgia Academy of Science was organized in 1922 and incorporated as a nonprofit organization in 1953. The Georgia Academy of Science continues to grow in size and academic strength. The interests of Academy members encompass all aspects of science and that interest is expressed through participation in one or more of eight sections. The 2022 Annual Meeting will be held face-to-face in the spring. Contact secretary, Joseph Sloop, at jsloop@ggc.edu or 678-485-5021.

The Hawai‘i Academy of Science (HAS) is a private, non-profit organization founded in 1925. The vision of the Academy is to promote scientific research & education in Hawai‘i and the Pacific Rim. The Academy is particularly interested in developing and executing programs and experiences for the science and learning communities. Contact us at (808) 956-7930 or acadsci@hawaii.edu for more information.

The Idaho Academy of Science (IAS) was organized in 1958 to further the cause of science and science education in Idaho. The IAS seeks to improve the effectiveness of scientific education in Idaho, and to promote public understanding and appreciation of the sciences and applied technology in the modern world. The Academy is the only statewide organization in Idaho which embraces all scientific disciplines. Contact the Executive Director at Executive.Director@Idaho.Academy or 1 208-317-1477.
Illinois Academy of Science: Our mission, from our founding in 1907, has been the promotion of scientific research, the diffusion of scientific knowledge, and the unification of scientific interests in Illinois. Beginning in 1907, we have held our annual meeting at varying locations around the state every year since. In addition, our refereed journal, *Transactions*, has been published continuously since its inaugural first volume in 1908. Illinois College at Jacksonville, IL, will host the 2022 IAS Annual Meeting April 8-9, 2022. For more information, contact Robyn Myers / ISAS Executive Secretary / Robyn Myers robyn.myers@illinoisstatemuseum.org

The Iowa Academy of Science is a 501(c)3 non-profit organization. The mission of the Academy is to further scientific research, science education, and public understanding of science, and to recognize excellence in these endeavors. You may contact Craig Johnson, our Executive Director by telephone, 319-273-2581 and email, craig.johnson@uni.edu or iascience@uni.edu

Indiana Academy of Science: We are a professional membership organization of Indiana scientists, dedicated to promoting scientific research and diffusing scientific information, encouraging communication and cooperation among scientists, and improving education in the sciences. The Annual Meeting is usually held early Spring of each year. Contact our Executive Director, Delores Brown, at (317) 974-0827 or ExecDir@indianaacademyofscience.org

The Kansas Academy of Science was organized as the Kansas Natural History Society at Lincoln College (now Washburn University) in Topeka on September 1, 1868. The 154th Annual Meeting of the Kansas Academy of Science will be held at Sterling College on April 1-2, 2022. More information Contact our Secretary, Sam Leung by emailing us at sam.leung@washburn.edu or kas@washburn.edu by calling us at 785-670-2375.

The Kentucky Academy of Science: The mission of the Kentucky Academy of Science is to foster scientific discovery and understanding in Kentucky. We are Kentucky’s statewide scientific society, and we are 4000+ members across the Commonwealth. For more information contact: executivedirector@ksscience.org Phone: 859-227-2837

The Louisiana Academy of Science: The Annual Meeting is usually held in March. Scientists from throughout Louisiana are invited to attend and to present the results of their research. For information contact President Esperanza Zenon, Nicholls State University College of Arts and Sciences, Thibodaux, LA 70310, ezenon@rpcc.edu

Michigan Academy of Science, Arts, and Letters: Mission: supporting research and disseminating knowledge through annual meetings and publishing a quarterly journal of outstanding papers in the sciences, humanities and social sciences. The 2022 Conference will be held virtually on March 4th, 2022. For information, email Director Jessie DeHaan, michiganacademy@alma.edu.

Minnesota Academy of Science Founded in 1873, the Minnesota Academy of Science (MAS) is a statewide 501(c)(3) organization committed to advancing science, technology, engineering, and math (STEM) in Minnesota by connecting Minnesotans of all backgrounds with resources and opportunities to engage in STEM learning, research, and communication—and to recognize excellence in these areas. Lara Maupin Exec dir info@mmmas.org

The Mississippi Academy of Science helps coordinate and organize scientific seminars and symposia in Mississippi. The 86th Annual Meeting will be held March 31 – April 1, 2022, at Biloxi Mississippi Convention Center For information, email mscademyofscience@comcast.net or visit http://msacad.org/

Missouri Academy of Science The purpose of the Academy is to foster public interest in scientific matters and promote cooperation between the scientific interests of Missouri. The 2022 Missouri Academy of Science Annual Meeting is scheduled for April 22-23, 2022, at Central Methodist University, Fayette, MO 65248 For information, contact Business Manager Robin Dean, University of Central Missouri, W.C. Morris 132A, rdean@missouriacadsci.org

Montana Academy of Science: The objectives of the Montana Academy of Science are to encourage interest and participation in the sciences and to promote public understanding of science. The Annual Meeting is usually held in the early Spring of each year. For Information, contact President Chrissie Carpenter, Carroll College, ccarpenter@carroll.edu

North Carolina Academy of Science: The objective of the North Carolina Academy of Science is to “encourage the advancement of science within the state of North Carolina by promotion of scientific research and by the fostering of education in the sciences” The 118th Annual Meeting of the North Carolina Academy of Science will be held hosted by Campbell University in Buies Creek, NC, March 18-19, 2022! For information about the meeting, contact Dr. Jordan Womick at womickj@campbell.edu. For other questions, check out our website at ncacadsci.org or email us at ncacadsci@gmail.com
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<th><strong>North Dakota Academy of Science:</strong></th>
<th><strong>New Mexico Academy of Science:</strong></th>
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<td>The purpose of the Academy is to promote and conduct scientific research and to disseminate scientific knowledge. The Annual Meeting date TBA. Membership in the Academy is open to persons who share the stated purpose of the Academy and who are active or interested in some field of scientific endeavor. The North Dakota Academy of Science was founded in 1908. For information, email <a href="mailto:ndas@ndacadsci.org">ndas@ndacadsci.org</a>.</td>
<td>The mission of the New Mexico Academy of Science is to serve the state of New Mexico and its communities by publishing science and science education materials, giving recognition for contributions to science and science education, fostering scientific cooperation, raising public awareness of the importance of science and science education, and providing advice on matters related to science and science education. For information about NMAS, email <a href="mailto:nmas@nmas.org">nmas@nmas.org</a>.</td>
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<th><strong>The Nebraska Academy of Sciences</strong></th>
<th><strong>The Ohio Academy of Science</strong></th>
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<td>The Nebraska Academy of Sciences was first organized in Omaha in 1880 with 75 charter members. The Union Pacific Railroad, which supported the programs to make Nebraska the educational and cultural center of the West, was instrumental in the establishment of the Academy. The NAS Annual Spring Meeting TBA. <strong>Nebraska Academy of Sciences</strong>, INC. 302 Morrill Hall, 14th &amp; U St Lincoln, NE 68588-0339 (402) 472-2644 Email: <a href="mailto:nebacad@unl.edu">nebacad@unl.edu</a> For information, contact <a href="mailto:nebacad@unl.edu">nebacad@unl.edu</a>.</td>
<td>The Ohio Academy of Science is the leading organization in Ohio to foster curiosity, discovery, and innovation and to unite all who value education, science, engineering, technology, or their applications for the benefit of society. The 129th Annual Meeting will be held on April 9, 2022 at the University of Findlay. For information, contact Executive Director Michael Woytek, <a href="mailto:info@ohiosci.org">info@ohiosci.org</a>, <a href="http://www.ohiosci.org">www.ohiosci.org</a>.</td>
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<th><strong>The Oklahoma Academy of Science</strong></th>
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<td>The purpose of the Academy is to stimulate education and research in science throughout New Jersey. For information about NJAS, visit us at Kean University, New Jersey Center for Science, Technology &amp; Mathematics Education, 1000 Morris Ave., STEM Bldg. 5-13, Union, NJ 07083, or <a href="http://www.njas.org">www.njas.org</a>.</td>
<td>The Oklahoma Academy of Science's goal is to stimulate scientific research; to promote fraternal relationships among those engaged in scientific work in Oklahoma; to diffuse among the citizens of Oklahoma a knowledge of the various disciplines of science; and to investigate and make known the material and educational resources of the State. For information, contact Executive Director Dr. Adam Ryburn, Oklahoma City Univ., 2501 N. Blackwelder Ave., Oklahoma City, OK 73106, <a href="mailto:aryburn@okcu.edu">aryburn@okcu.edu</a>.</td>
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<td>Since 1924, we have been educating and supporting scientists throughout Pennsylvania by striving to promote science, technology, education, and the diverse interests of our members. We are the vital and valuable resource for Pennsylvania science professionals, faculty and students. The Annual Meeting is Usually held in the early spring. For more information visit our webpage at <a href="https://pennsci.org/">https://pennsci.org/</a>, or contact President Matthew Wallace at <a href="mailto:mwallace@esu.edu">mwallace@esu.edu</a>.</td>
<td>The Oregon Academy of Science promotes scientific research and education in Oregon. The annual OAS meeting acknowledges contributions by outstanding university and K-12 educators demonstrating dedication to the advancement of science education. Additionally, each year the Academy acknowledges an Oregon scientist who has made outstanding contributions in their field. For information contact: Secretary: Jeff Duerr at <a href="mailto:jduerr@georgefox.edu">jduerr@georgefox.edu</a> <a href="http://oregonacademyscience.org/">http://oregonacademyscience.org/</a></td>
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<th><strong>The South Carolina Academy of Science (SCAS)</strong></th>
<th><strong>South Dakota Academy of Science:</strong></th>
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<td>SCAS was organized in 1924, and in 1927 the Academy affiliated with the American Association for the Advancement of Science. The 2022 Annual Meeting will be held in person on April 2, 2022, at the USC Aiken campus. For information contact: Secretary Sheryl Wiskur at <a href="mailto:wiskur@mailbox.sc.edu">wiskur@mailbox.sc.edu</a> Website: <a href="http://scacademysci.org/">http://scacademysci.org/</a></td>
<td>The purpose of the South Dakota Academy is to develop interest in science and to provide a forum for the scientific community to disseminate scientific information. Contact: Paul Johnson at <a href="mailto:paul.johnson@sdsstate.edu">paul.johnson@sdsstate.edu</a>, Website: <a href="http://www.sdaos.org/">http://www.sdaos.org/</a></td>
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**Southern California Academy of Science:**
The Southern California Academy of Sciences is dedicated to promoting fellowship among scientists and those individuals interested in science and more. The SCAS Annual Meeting was held virtually at USC, Santa Barbara May 7, 2021. For more information visit the website: [http://scas.nhm.org/](http://scas.nhm.org/)

**The St. Louis Academy of Science** has many events planned for the future. On our website you will find many lectures and events for the coming months. For more information call 314-533-8083 or visit [http://academyofsciencestl.org/](http://academyofsciencestl.org/)

**The Tennessee Academy of Science** seeks to promote scientific research and the diffusion of knowledge concerning science. For more information contact: Dr. Marcia Schilling, TAS Secretary. Office Phone: 931-221-7782; email: schillingmg@apsu.edu; or visit the website: [http://www.tennacadofsci.org/](http://www.tennacadofsci.org/)

**Texas Academy of Science:**
The Texas Academy of Science promotes scientific research in Texas colleges and universities, encourages research as a part of student learning, and enhances the professional development of its members. TAS possesses a complex, intriguing and long-standing educational mission. For more information contact Secretary Frank J. Dirrigl, Jr. at frank.dirrigl@utrgv.edu or visit the TAS webpage here: [www.texasacademyofscience.org/](http://www.texasacademyofscience.org/)

**Utah Academy of Sciences, Arts, and Letters:** Founded 3 April 1908, the Utah Academy of Sciences was organized "to promote investigations and diffuse knowledge in all areas of science." The Utah Academy of Sciences, Arts, and Letters and was incorporated as a nonprofit organization in 1959. The 2022 Annual Meeting will be held in person in the spring. To find more information please contact: Colleen Boam UASAL Secretary utahacademy@gmail.com or visit: [http://www.utahacademy.org/](http://www.utahacademy.org/)

**Vermont Academy of Arts and Sciences**
The Vermont Academy of Arts and Sciences was organized in October 1965. Membership is open to all who share the Academy’s interests. Becoming a member will help support the mission and the free-to-the-public educational activities of the VAAS. For information contact: John Van Hoesen: Green Mountain College, Geology at vanhoesen@greenmtn.edu.

**The Virginia Academy of Science** promotes the advancement of science in the Commonwealth of Virginia. Our publication the Virginia Journal of Science publishes peer reviewed original research reports as well as abstracts of the Annual Meeting presentations. The VAS Annual Meeting is most commonly held in the Spring of each year. For more information contact: vasoffice@vacadsci.org or call 804-864-1450.

**Washington D.C. Academy of Science:**
The Washington Academy of Science was incorporated in 1898 as an affiliation of Washington D.C. area scientific societies. The formation of the Academy culminated a decade of planning under the leadership of the Philosophical Society of Washington. The founders included Alexander Graham Bell and Samuel Langley, Secretary of the Smithsonian Institution. For more information contact: academy@washacadsci.org; call 202-326-8975 or visit: [http://www.washacadsci.org/](http://www.washacadsci.org/)

**The West Virginia Academy of Science** is an organization to meet and work with professional associates in many areas of science, engineering, and humanities. It is a corporation chartered by the authority of the West Virginia legislature for the advancement of scientific knowledge and the promotion of scientific work. The Annual Meeting of WVAS is usually held in the early Spring of each year. For more information contact President Sara Sawyer at sara.sawyer@glenville.edu or visit: [http://pwvas.org](http://pwvas.org)

**The Wisconsin Academy of Sciences, Arts, and Letters** brings people together at the intersection of the sciences, arts, and letters to inspire discovery, illuminate creative work, and foster civil dialogue on important issues. In this way, we connect Wisconsin people and ideas for a better world. For more information: contact@wisconsinacademy.org or visit: [www.wisconsinacademy.org/](http://www.wisconsinacademy.org/)

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Representing Section Y: General Interest in Science and Engineering

Congratulations to AAAS Fellows 2020-2021

Nan Broadbent
Seismological Society of America
For outstanding contributions as a science communicator for scientific societies, particularly the American Association for the Advancement of Science and the Seismological Society of America.

Tinsley Davis
National Association of Science Writers
For distinguished leadership that has increased the vibrancy of the U.S. science writing community, enhanced public engagement with science, and strengthened science communication globally.

Linda D. Harrar
WGBH Educational Foundation
For tireless devotion and outstanding leadership in television science journalism focusing on human health, the global environment, biodiversity, and remarkable women leaders in developing countries.

James H. Lambert
University of Virginia
For distinguished contributions to the field of risk analysis, particularly using systems engineering tools to address critical infrastructure risk and resilience.

Andrew D. Maynard
Arizona State University
For distinguished contributions to the public’s understanding of science, risk and responsible innovation in the fields of nanotechnology, artificial intelligence and other emerging technologies.

Jeremy B. Searle
Cornell University
For distinguished contributions in the field of evolutionary biology and for the promotion of science through teaching, international work, media activities and science-based natural history.

Ronald M. Thom
Pacific Northwest National Laboratory (Emeritus)
For distinguished contributions to coastal and estuarine ecosystem restoration, in assessment of cumulative effects of multiple restoration actions and adaptive management of restored systems.

Cliff Wang
U.S. Army Research Office/North Carolina State University
For distinguished contributions to the field of science of security, and outstanding leadership in national research and transforming results into high impact cyber defense capabilities.

Nan Yao
Princeton University
For outstanding achievements in materials and structural analysis and distinguished contributions in related education, research, and service to advance science and engineering and their applications.
Kelly Salmon, Director of the American Junior Academy of Science

I just joined the NAAS board this year when I was elected as the AJAS Director. I am from New Jersey and received a Bachelor of Science in Biology from The College of New Jersey. While there, I started working in a molecular biology lab and was bit by the research bug. I followed that passion to complete a PhD in Biochemistry and Cell Biology at Dartmouth College. While at Dartmouth, I participated in and organized outreach programs such as Science Day at Dartmouth, which invites local students into labs for demonstrations. Since I have a strong interest in education and outreach, I became a scientist for the New Hampshire Academy of Science (NHAS) when I finished my PhD in 2018. I help run a variety of NHAS programs for middle and high school students to conduct their own scientific research projects with my focus being on life science work. I was also the Director of the NH Junior Academy of Science from 2019-2021. When not in a lab, I enjoy hiking, kayaking, snowshoeing, traveling, and cooking/baking. I live with my husband and our one-year-old cat in New Hampshire.

Ernie Schiller, NAAS Treasurer

Ernie Schiller, Iowa Academy of Science became the NAAS Treasurer in 2014. Since then, he has served in the leadership role of handling the NAAS financial details since then. He has had the pleasure of working with the many volunteer officers of the NAAS over the years. While being a retired Science Teacher in Southeast Iowa, his first experience with AJAS/NAAS was in 1998 when his first student was selected to represent The Iowa Academy of Science & The Iowa Junior Academy of Science at AJAS. He has attended almost every AJAS since, either attending with students that he has sponsored and assisted with their research projects or as an officer of NAAS. Now in his retirement years he spends most of his international travel to the 3rd World Country---Nepal where he has founded a 501 (c) 3 organization aimed at helping the poorest Nepalese children in the most remote mountainous regions stay in school as their families try to recover from the massive 8.7 Richter-scaled earthquake of 2015. His non-profit has helped over 1,200 students remain in school, with now over 34 attending further education in Kathmandu. www.rebuildnepaleducation.org
NAAS Board Members

Suzanne Thurston
AAAS Education Program Director

Suzanne Thurston, NAAS Board Member, is a Program Director at the American Association for the Advancement of Science. Thurston has supported and led education projects at AAAS for more than 20 years. As a Program Director in Inclusive STEM Ecosystems for Equity and Diversity (ISEED), her work focuses on creating inclusive STEM opportunities and career pathways for all K-12+ learners in formal and informal educational settings.

Her current work includes research and development of cutting-edge mobile technologies as a means of bringing new audiences into urban National Parks and showcasing excellent STEM non-fiction books for young children through young adults. She also oversees programs that support STEM career opportunities for university students with disabilities and another that provides resources and community for people who want to share and learn more about broadening participation in STEM.

Thurston believes all students should have opportunities for transformative, meaningful, and culturally representative science experiences throughout their education so that they will see themselves as scientists, inventors, storytellers, and advocates of science. @suzannethurston

Michael S. Strauss, Ph.D.
AAAS Fellow

Mike Strauss earned his Ph.D. in developmental biology at the University of California, Irvine studying floral physiology. He went on to study the biology of taro, Colocasia esculenta, and its relatives in Hawaii and the South Pacific on the faculty of Northeastern University, Boston. But in 1986 he departed academia for a new career in science and policy in Washington, D.C. First writing about biodiversity at a Congressional science office, then global genetic resources at the National Academy of Sciences and still later as director of the annual meeting of the American Association for the Advancement of Science (Where he first encountered AJAS and served a term as NAAS President). While at USDA’s Agricultural Research Service directing the Office of Scientific Quality Review he began working with Dr. Randy Olson to develop training for researchers in clear scientific communication. Together they have introduced the use of narrative structure in scientific communication to scientists around the U.S. Now retired his work with Dr. Olson continues to bring the skills of clear, concise communication to the scientific community. Dr. Strauss is an elected AAAS Fellow (1994), Research Associate of the Missouri Botanical Garden, and accomplished trainer of horses for the sport of equestrian vaulting.
NAAS Board Members

David Bass, Ph.D.

Dr. David Bass is a Professor of Biology & Curator of Invertebrates at the University of Central Oklahoma where he teaches courses in the fields of invertebrate zoology and ecology. He received a Ph.D. (Zoology) from Texas A&M University and M.S. (Biology) and B.S. (Science Education) degrees from Lamar University. Dr. Bass has also taught courses for the University of Oklahoma, the University of Colorado, the University of the West Indies, and the Bellairs Research Institute. He was presented the Neely Award for Teaching by UCO in 2011 and the Medal of Excellence for University Teaching by the Oklahoma Foundation for Excellence in 2020. In addition, Dr. Bass served as a Fulbright Professor and Visiting Research Fellow at the University of the West Indies (Barbados) during the 1995-96 academic year. He is recognized internationally as an authority on Caribbean biota and holds appointments of Guest/Visiting Research Scientist for several Caribbean island nations. His ongoing research efforts focus on the ecology and biogeography of aquatic invertebrates 1) in North America and 2) on small islands in the Caribbean region. These have resulted in numerous publications and presentations at scientific meetings. In recognition of this body of work, Dr. Bass was honored by UCO as a Haumtman Research Fellow in 2004 and inducted as a Fellow by the American Association for the Advancement of Science in 2009. In addition, he has active roles in numerous university committees and events. Dr. Bass is an active member of several professional societies including the American Association for the Advancement of Science and the Oklahoma Academy of Science. He is a past president of both the Oklahoma Academy of Science and the National Association of the Academies of Science, and has served on their governing boards for many years. Dr. Bass enjoys sailing (including coaching UCO’s sailing team), hiking, and scuba diving.

Michael P. Cohen, Member at large: Business

Michael P. Cohen (Mike) is a NAAS representative at large. He is a member of the Washington (DC) Academy of Sciences (WAS) Board of Managers and has served as their president. He is also a member of the Virginia Academy of Sciences. Mike is a principal statistician at the American Institutes for Research (AIR), a nonprofit organization. Mike is a retired federal government employee, having worked for the Bureau of Labor Statistics, the National Center for Education Statistics, and the Bureau of Transportation Statistics (BTS). His last government position was as the BTS Assistant Director for Survey Programs. Most of Mike’s research has been in the area of estimation and sample design for complex sample surveys. Mike is an Accredited Professional Statistician (PStat) of the American Statistical Association. He is a fellow of the American Association for the Advancement of Science (AAAS), the American Educational Research Association, the American Statistical Association (ASA), the Royal Statistical Society, and the Washington Academy of Sciences. Mike is an elected member of the International Statistical Institute and Sigma Xi. He is a senior member of the American Society for Quality (ASQ). He earned his doctoral degree from UCLA in mathematics with specialization in mathematical statistics. Mike has served as president of the Washington Statistical Society and has held several ASA elected positions. He served for six years (two terms) as the ASA Representative to AAAS Section Q (Education) and during that time was also the Chair of the ASA Committee of Representatives to AAAS. When not engaging in professional activities, Mike enjoys dining with friends at ethnic restaurants. He also enjoys attending stage plays although COVID-19 has limited his attendance.
NAAS Board Members

Michael T. Roche, NAAS Board Member
High Technology High School, Lincroft, NJ (retired July 1, 2020)

Mr. Roche earned a B.S. in Environmental Science from Rutgers University and an M.A. in Environmental Studies from Montclair University. Mr. Roche is currently serving in his second term on the NAAS board of directors. His current focus involves assisting with the AJAS annual conference planning, specifically addressing virtual options for research roundtable and poster sessions. He has worked as a secondary school teacher for 44 years, for the past two and a half decades at High Technology HS in Monmouth County, NJ, a specialized career academy that has been repeatedly recognized as the number one STEM school in the nation by US News. While there, he proposed, developed, and coordinated the student research program and served as the faculty advisor for the experimental research group. Mr. Roche also served as executive director for The Stars Challenge, a non-profit that targeted academically talented middle school students. Prior to that he served as a Director for the National Consortium for Specialized Secondary Schools of Mathematics, Science and Technology (NCSSSMST) and is the recipient of numerous grants and awards for excellence in science teaching. Mr. Roche has been recognized with the Siemens Founders Award; STAR Teacher Award; Siemens Teachers as Researchers; University of Rochester Singer Family Prize for Excellence in Secondary School Teaching; NJIT Honors College Award for Exceptional Service by a High School Teacher; Tandy Technology Scholars, National Level Recognition; Presidential Award for Excellence in Science Teaching, NJ State Finalist; NJ Ocean County Teacher of the Year; Selected to attend first NJ Commissioner's Symposium for Outstanding Teachers; Awarded competitive N.J. Department of Education grant to develop, write, and publish four volume text; Student Guide to Environmental Science, authored texts presented in Washington, D.C. as a New Jersey exemplary state project.

Donna Gerardi Riordan
Executive Director, Washington State Academy of Sciences

NAAS Board of Directors, Member at Large (elected 2018)
Chair, Governance Committee (appointed 2021)
Member, Fundraising Committee (appointed 2021)
Member, Finance Committee (appointed 2021)

Donna is a proven nonprofit leader with more than three decades of experience bridging the gap between science and policy at the national and state levels. Her most recent role is as executive director of the Washington State Academy of Sciences, after working in similar roles in California at the California Council on Science & Technology, where she was the co-architect of the first state-level Science & Technology Fellows Program, and at the US National Academy of Sciences, where she founded and directed its Office of Public Understanding of Science. She also has consulted with national and state level organizations on science, technology, engineering and mathematics (STEM) education, and founded Research Northwest, a non-profit organization devoted to generating best available science for policy decisions. She holds a BS in biology from Georgetown University and an MA in Science and Technology Policy from the George Washington University. She is an elected Fellow of the American Association for the Advancement of Science.
NAAS Board Members

Dr. Preston J. MacDougall,
NAAS At-Large Board Member

Preston MacDougall is a Professor in the Department of Chemistry at Middle Tennessee State University. He has teaching duties that range from Freshman General Chemistry courses and labs to In-depth Physical Chemistry courses and labs. He also teaches courses on research methods and softs skills for both undergraduates and graduate students. Dr. MacDougall came to MTSU in 1994 following a two-year postdoctoral fellowship at Los Alamos National Laboratory, where he did computational materials science research in the Electrochemical Materials and Devices Group in collaboration with Dr. Antonio Redondo. Prior to that he held a postdoctoral fellowship at Texas A&M University, where he conducted computational chemistry research on chemical catalysis in collaboration with Dr. Michael B. Hall. Dr. MacDougall received his B.Sc. (Hons.) and Ph.D. degrees in chemistry from McMaster University in Canada, where he worked with Prof. R. F. W. Bader and contributed fundamentally to the development of the Quantum Theory of Atoms in Molecules. He has been invited to give lectures at universities across the country and around the globe. Dr. MacDougall’s recent research in theoretical and computational chemistry, most recently funded by the U.S. Department of Energy, has extended NASA’s hyperwall visualization technology to 3D. Applications of this new visualization technology are in drug design and nanotechnology. Among his public service activities, Dr. MacDougall has been the Director of the Tennessee Junior Academy of Science since 2014, served as an Advisory Board Member for the Discovery Center at Murfree Spring since 2000, and was a founding Advisory Committee member for the annual Tennessee STEAM Festival. For these and other contributions to public science, Dr. MacDougall was awarded the 2018 Outstanding Public Service Award at MTSU.

Dr. John Charles Nemeth
President. Education and Research Consulting and Former CEO and Executive Director of Sigma Xi, The Scientific Research Honor Society

Starting as a high school teacher and coach, then through my further fifty-year plus career in science and research, particularly with Georgia Tech, Oak Ridge Associated Universities, Sigma Xi and AAAS, I have become an ardent advocate for young researchers. Their enthusiasm for and love of research are characteristics to be nurtured and treasured. I joined the NAAS Board to get breakfast—the NAAS/AJAS breakfast at the annual AAAS conference and the several science fairs and poster sessions which I participate in have become the highlights of my year as a professional scientist. It is my opportunity to help lay a foundation of love for research and education that; incorporates my role, now, of paying back for the rewarding career I have had, engenders the feeling of worth and need throughout the most active years to pay now, and that finally outlines for the young how they can begin to pay forward for this wondrous journey, lined with rewards and assistance, that they embark upon. Finally, my first honorific speaking invitation was to the North Carolina Academy of Science in Boone, NC in the mid-1970s at Appalachian State University.
Don M. Jordan, NAAS Board Newsletter Editor and AAAS representative. Center for Science Education, College of Arts and Sciences, UofSC, Professional field: Mathematics and Mathematics Education. Ph. D UofSC 1973 Full Professor USC College of Arts and Sciences, since 1992. Dr. Jordan has been a member of NAAS since 1984, serving in many roles, President, Secretary, Proceeding Editor, Newsletter Editor and NAAS representative to AAAS Council. Dr. Jordan was elected President of the South Carolina Academy of Science, and in February 1993, he was elected a Fellow of AAAS. Dr. Jordan received the Helms Award of Excellence from the S. C. Science Council and the S. C. Hall of Science and Technology. In March of 2000, he received The Order of the Silver Crescent from the Governor of South Carolina, which is an award for dedication, commitment, and leadership by an individual in the state. In 2008 Don Jordan received the Governor’s Award for Excellence in Science Awareness, one of the highest awards one can receive in the State of South Carolina. In 2009 he received the Catalyst Award from the South Carolina Science Council for his efforts in South Carolina on behalf of its students and teachers. Jordan was recognized for his efforts with Intel Science & Engineering Fairs in South Carolina, The DOD Junior Science and Humanities Symposium, the Development of on-line courses using Adobe connect for Teachers and his development of programs to for the youth of the state as well as his research in metric training for teachers. The Catalyst Award is the highest award given by the SC Science Council. Dr. Jordan has promoted Metric Education over 35 years and secured over 30 SC Metric Proclamation for Metric Week in SC and a Fellow of USMA.

Philip Winchell serves as the NAAS Archivist, a position he has held since 2017. He is also the copyeditor of The Ohio Journal of Science. Originally from the Columbus, Ohio, area, Philip began participating in Ohio Academy of Science sponsored high school science fairs in 1979. He received superior ratings for four years at the OAS’s State Science Day and became an AJAS Fellow by attending the 1983 AJAS meeting in Detroit (from the Ohio Academy). These extracurricular high school science programs were decisive in shaping Phil’s future STEM career. Largely due to his science fair participation he was accepted to Wittenberg University in Springfield, Ohio. He studied Geology, and graduated, Cum Laude, in 1988. In 1988 Philip began a federal government career as a civilian technical analyst at Wright-Patterson AFB, Dayton, Ohio. Upon his federal retirement in 2013 he was presented with a “legend” award—a semiformal lifetime achievement award—voted on by his coworkers and supervisors. An Eagle Scout, Philip has had a lifetime passion for science and technology in general: particularly in the areas of aerospace, astronomy, technical optics, photography and image science, geology, dogs, and any topic dealing with high-precision instrumentation. To support his community, over the years, he has worked 100+ overnights in a homeless shelter (even his golden retriever worked 50 nights), plus several thousand hours working at food banks and food pantries—all in the Springfield, Ohio, area. In his earlier incarnations he was a SCUBA diver and, as a sport skydiver, has made twelve jumps: eleven from a perfectly good aircraft (on one jump, after he exited, the plane crashed on landing—his only good story). Phil’s earliest datable memory (at age five) was watching Neil Armstrong and Buzz Aldrin step foot on the moon. Philip is married to his wife Pam, a public librarian, who is (ironically) formally trained as an archivist.
I’d like to introduce myself as the President-Elect of the National Association of Academies of Science (NAAS). I am very excited to be leading such an important and impactful professional association. I look forward to collaborating with you to leverage new opportunities to nurture young scientists, communicate with other Academies, and increase NAAS Board membership.

I am a Full Professor of Mathematics at Montgomery College in Germantown, MD. My research area is in Optimization and Partial Differential Equations, where I study the use of parametric nonlinear differential equations as a mathematical model. At Montgomery College, I serve as the mathematics advisor for our Germantown campus and am the former Chair of the Workforce Development and Community Engagement Subcommittee of the President's Advisory Committee on Equity and Inclusion.

My research has resulted in applied mathematics research publications and a host of professional presentations, including a paper presented at the 2018 International Congress of Mathematicians in Rio de Janeiro, Brazil and a Spring 2020 publication, Elementary Divisor, in the Journal of the Washington Academy of Sciences. I was elected as a 2018 – 2019 AAAS Fellow for contributions to the field of applied mathematics, particularly for the discovery of Torain’s Equations that model the harvesting of species under abnormal conditions.

As I see it, we have three main goals: supporting the professional development of young scientists, earnestly communicating with other Academies, and strengthening networking opportunities at NAAS meetings. With a concentrated focus on these three goals, I believe that NAAS will continue its reputable and sustaining legacy of excellence.

We have so many great people and so many opportunities in NAAS. I want to engage you and want us to work collaboratively to grow the association and the awareness of the value of our work.

Sincerely,

Dr. David S. Torain II
Professor of Mathematics
NAAS Board Members

Se Woong Jeong
Webmaster

Se Woong Jeong currently serves on the NAAS Board and as the Webmaster. Jeong is employed as Senior Research & Development Specialist at Regeneron Pharmaceuticals, Inc. in New York but affiliated with the Virginia Academy of Science (VAS). He is the Chairman of the Virginia Junior Academy of Science (VJAS) Board and Committee, and serves as one of AAAS/NAAS state delegate representative for VAS.

In his day job, Jeong is a bench scientist at Regeneron, conducting highly technical experiments and leading the execution of translational immuno-oncology projects. His research advances the science of understanding the phenotypic and functional role of tumor infiltrating lymphocytes and the various immune cells residing within a tumor and its microenvironment. When not in the lab, Jeong spends his time volunteering to serve and cultivate the minds of our young, future scientists. He has been the Chairman of the Virginia Junior Academy of Science Board, a Committee under the Virginia Academy of Science, for the past six years. In his capacity as Chairman, Jeong leads the vision, strategy and operations of the Junior Academy activities – including the big event of VJAS, the Annual Meeting & Research Symposium each May. At the 2021 Virginia Academy of Science 99th Annual Meeting, Jeong was named as a Fellow of the Virginia Academy of Science. At age 29, he makes history as the youngest to be nominated and elected as a Fellow of VAS. Jeong’s leadership is only part of his history with the Junior Academy. He was a participant of VJAS all four years of high school while attending the Roanoke Valley Governor’s School for Science and Technology, and returned to serve as a volunteer judge as an undergraduate student at the University of Virginia.

Peter Faletra PhD
New Hampshire & AAAS Council

Peter Faletra has been an active member of the AAAS and NAAS for over 25 years. He received is doctoral degree for his work in stem cells which led to his co-founding a successful biotechnology company that produced antisera used in clinical assays and vaccine development. His company received an NIH Innovative Research award for its work in large-scale antisera production. He was later named a distinguished Einstein Fellow for his outreach work to secondary school students in performing original research. This soon led to his being appointed as a Director of Workforce Development for teachers and Scientists at the Office of Science in the US Dept. of Energy.

Dr. Faletra retired from government work and with the help of regional business leaders rejuvenated the New Hampshire Academy of Science. This led to his gathering the support from the region’s business and academic community to build a STEM Center for middle and high school students to perform their own research with expert mentor scientists and engineers. The current NHAS STEM Center has about 3000 square foot of lab space and over ½ million dollars of advanced science and engineering research equipment where students from around the USA come and perform research in the summer. This is one of the main reasons that the NHAS has been successful in bringing among the most students to the annual AJAS/AAAS symposia in recent years. For his work with students from middle school through medical school, he has received a variety of national, state, and regional mentorship awards. He is currently honored to be serving on the NAAS board as the delegate to the AAAS and is a member of the AAAS Council.
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OKLAHOMA ACADEMY OF SCIENCE

For the second consecutive year, the Oklahoma Academy of Science had to cancel its Fall Field Meeting scheduled for late September, due to rising COVID numbers. This was disappointing to the membership, but everyone involved understood it was the proper decision. We are all hopeful conditions will improve by next year.

The Annual Technical Meeting is scheduled for November 5, 2021 at East Central University in Ada. Like conferences everywhere, this event was held virtually last year. The Executive Committee is closely monitoring the rising COVID numbers across the state and will make a final decision regarding whether this meeting will be held in person, or if we will need to pivot again to the virtual format. A final decision will be announced on the OAS website (www.oklahomaacademyofscience.org/) very soon.

Upcoming Meetings:
AJAS/AAAS Meetings, Philadelphia, PA February 16th-20th, 2022

Past Meetings:
AJAS/AAAS Meetings, Phoenix, AZ February 10th-14th, 2021
AJAS Seattle, WA, Delegates (2020) - 91 females/61 males = 152
AJAS Wash, DC, Delegates (2019) - 96 females/57 males = 153
AJAS Austin, Delegates (2018) - 75 females/66 males = 141
AJAS Boston, Delegates (2017) - 74 females/69 males = 143
AJAS Wash, DC Delegates (2016) - 82 females/61 males = 143
AJAS San Jose Delegates (2015) - 73 females/65 males = 138
AJAS Chicago Delegates (2014) - 89 females/67 males Total = 156