Why should I care?
At the center of every good article, novel, movie, research project is this question. Too often scientific presentations or even major research papers begin by telling us what they did. But before I know what you did, I need to know why you did it (and “because I’m required to do a project is not the answer”). Scientific research is aimed at solving a problem or understanding something. In the end, you will need to draw a conclusion about your results and starting up front by telling me first, what we know, then what we don’t know (and why knowing that would be important) will lead your reader or hearer into your work. Similarly, at the center of what we do through AJAS needs always to answer that same question. We don’t just gather student scientists together to tour a city. Rather we seek to give them a truly scientific experience where they will find their research valued and of great interest. We want them to view their work not as simply a high school activity but rather that they are colleagues with the many scientists, engineers, and policymakers that attend the American Association for the Advancement of Science meeting. We want them to see that their work is valued. Not just by their teachers and chaperones, but also by the larger scientific community. The AJAS meeting is a unique event and in 2020 it will be in one of my favorite U.S. cities. Seattle is a beautiful area but more than that, it is a center for technology and scientific advancement. Much of the foundation for our “Internet Age” began here and still continues. Our delegates will have the rare privilege of an “up front” view of the future of science and technology, through their interactions with scientists and engineers as well as with their many AJAS colleagues. We look forward to seeing you there!

Michael Strauss, President of NAAS

Envisioning
Tomorrow’s Earth
By Lee Brogie, AJAS Director

The 2020 AAAS Annual Meeting’s theme Envisioning Tomorrow’s Earth celebrates the scientific endeavors that have improved life on Earth and challenges the scientific community to develop solutions to the problems facing us today and tomorrow. The AAAS Annual Meeting is the premier global science gathering allowing presenters and attendees an opportunity to network with future collaborators across a variety of disciplines. This is an exciting venue for the 2020 AJAS Fellows – America’s best pre-collegiate science researchers – to share their research and make connections with today’s leading scientists. Their research will be shared at the AJAS Poster Session on Friday, February 14th from 12:00-5:00 pm at the Washington State Convention Center and at the AJAS Oral Presentations on Saturday, February 15th from 1:30-4:30 pm at the Sheraton Grand Hotel. In addition, the students’ names and their research titles will be printed in the Poster Section of the AAAS 2020 Program and their abstracts will be digitally published and posted on the AAAS website. The AAAS Program is a wonderful memento of their participation in the world’s most prestigious general science meeting. Mark your calendars so that you do not miss these grand events. Congratulations to our 2020 AJAS Fellows!

CONTINUED ON PAGE 4

Alan I. Leshner Invitation
I would like to encourage all AAAS affiliates, including the fifty National Association of Academies of Science (NAAS) Affiliated Academies of Science, to participate in the AAAS Annual Meeting, which will be taking place February 13-16, 2020 in Seattle, Washington. This year the theme is “Envisioning Tomorrow’s Earth.”

We encourage National Association of Academies of Science members to select exemplary pre-college members of their Junior Academies to attend the AAAS Annual Meeting and present their award winning research at the AJAS Poster Session. See page 2: AAAS appoints NEW CEO effective January 6, 2020.

Alan I. Leshner
Interim CEO, AAAS

Retirement Wishes to
Dr.Rush D. Holt
By Ed M Brogie, NAAS Executive Director

We would like to thank Dr. Rush D. Holt for serving as CEO of AAAS from 2015 to 2019, and for his inclusion efforts of the American Junior Academy of Science and National Association of Academies of Science in the annual meetings of AAAS. Rush has always taken time to visit with some of the AJAS delegates each year during the AAAS annual meetings. Rush always took time to return my phone calls on NAAS business and helped make AJAS more visible and welcomed each year at the AAAS meetings. Rush also took time to write a short article for the NAAS Newsletter to maintain communication with the 50 AAAS Affiliated Academies of Science. Below is a short Bio of Rush Holt’s career as we wish him a very Happy Retirement.

CONTINUED ON PAGE 2
AAAS Board Members 2019-20

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michael_strauss1@hotmail.com

Dr. Steve Wardlaw (NC)
NAAS Immediate Past President
wardlaww@gmail.com

Amanda Fuller (KY)
NAAS President-Elect
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Mr. Ed M. Brogie (NE)
NAAS Executive Director
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Ms. Lee A. Brogie (NE)
AJAS Executive Director
leebrogie@academicacademies.org

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Ms. Betty Calanger (DC)
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David Buss
Member at Large (Academies)
buss@usa.edu

Dr. Parikh selects New CEO for 2020

Dr. Sudip Parikh will join AAAS as its next Chief Executive Officer and Executive Publisher of the Science Family of Journals, effective January 6, 2020.

Dr. Parikh, who will be AAAS’ 19th chief executive in its 171-year history, is currently Senior Vice President at DIA Global, a non-profit organization and publisher that mobilizes life science professionals from across all areas of expertise to engage with patients, peers, and thought leaders. As Managing Director of DIA Americas, Dr. Parikh leads strategy and operations for the Americas region of the international association, overseeing effective non-partisan policy advocacy while growing membership.

Prior to DIA, Dr. Parikh served in multiple senior leadership roles at the multibillion-dollar global research and development organization Battelle, including as Vice President and General Manager of Health and Consumer Solutions, and Vice President of Health Policy. Earlier in his career, Dr. Parikh was science advisor and professional staff for the Senate Appropriations Committee, where he advised on appropriations and policy for federal research agencies and conducted congressional oversight of federally funded programs. He also served as a Presidential Management Fellow at the National Institutes of Health.

Dr. Parikh serves on the boards of Research! America and Friends of Cancer Research, and on the programmatic consultation committee of the National Institutes of Health Center for Advancing Translational Sciences. He has received multiple awards for public service, including recognition from the American Association of Immunologists, the National AIDS Alliance, the Coalition for Health Services Research, and the Juvenile Diabetes Research Foundation.

Dr. Parikh holds a Ph.D. in macromolecular structure and chemistry from the Scripps Research Institute, where he was awarded a National Science Foundation Graduate Research Fellowship, and a bachelor’s degree in materials applied science from the University of North Carolina at Chapel Hill. The search was extraordinarily thorough and involved close consideration of numerous qualified and diverse candidates. The search committee and Board, both of which unanimously supported Dr. Parikh’s appointment.

The AAAS Board has been extremely impressed by Dr. Parikh vision for AAAS, and how he hopes to infuse all areas of science into our society for the benefit of the human condition. He will lead AAAS into the future and bring significant expertise working across sectors and with policymakers in the U.S. and globally.

Dr. Holt (right)

“Rush D. Holt, PhD has held positions as a teacher, scientist, administrator, and policymaker. In 1982, he took leave from his faculty position at Swarthmore College to serve as an AAAS/American Physical Society Science and Technology Policy Fellow on Capitol Hill. Holt has said that his fellowship was “life changing,” and served as a springboard to his role in Congress. Before coming to AAAS, Holt served for 16 years as a member of the U.S. House of Representatives, representing New Jersey’s 12th Congressional District. On Capitol Hill, Holt established a long track record of advocacy for federal investment in research and development, science education, and innovation. He served on the National Commission on the Teaching of Mathematics and Science (known as the Glenn Commission), founded the Congressional Research and Development Caucus, and served as a co-chair of the Biomedical Research Caucus. Holt served eight years on the Permanent Select Committee on Intelligence and chaired the Select Intelligence Oversight Panel, which worked to strengthen legislative oversight of the intelligence community.

Following his service in Congress, Dr. Holt became the chief executive officer of the American Association for the Advancement of Science (AAAS) and executive publisher of the Science family of journals in February 2015 until his retirement in July 2019.”

AAAS Newsletter

By Ed M. Brogie - NAAS Executive Director
Continued from Page 1

Retirement Wishes to Dr. Rush D. Holt

Dr. Rush D. Holt, PhD has held positions as a teacher, scientist, administrator, and policymaker. In 1982, he took leave from his faculty position at Swarthmore College to serve as an AAAS/American Physical Society Science and Technology Policy Fellow on Capitol Hill. Holt has said that his fellowship was “life changing,” and served as a springboard to his role in Congress. Before coming to AAAS, Holt served for 16 years as a member of the U.S. House of Representatives, representing New Jersey’s 12th Congressional District. On Capitol Hill, Holt established a long track record of advocacy for federal investment in research and development, science education, and innovation. He served on the National Commission on the Teaching of Mathematics and Science (known as the Glenn Commission), founded the Congressional Research and Development Caucus, and served as a co-chair of the Biomedical Research Caucus. Holt served eight years on the Permanent Select Committee on Intelligence and chaired the Select Intelligence Oversight Panel, which worked to strengthen legislative oversight of the intelligence community.

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AAAS selects New CEO for 2020

Dr. Sudip Parikh
Senior Vice President at DIA Global

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Dr. Parikh, who will be AAAS’ 19th chief executive in its 171-year history, is currently Senior Vice President at DIA Global, a non-profit organization and publisher that mobilizes life science professionals from across all areas of expertise to engage with patients, peers, and thought leaders. As Managing Director of DIA Americas, Dr. Parikh leads strategy and operations for the Americas region of the international association, overseeing effective non-partisan policy advocacy while growing membership.

Prior to DIA, Dr. Parikh served in multiple senior leadership roles at the multibillion-dollar global research and development organization Battelle, including as Vice President and General Manager of Health and Consumer Solutions, and Vice President of Health Policy. Earlier in his career, Dr. Parikh was science advisor and professional staff for the Senate Appropriations Committee, where he advised on appropriations and policy for federal research agencies and conducted congressional oversight of federally funded programs. He also served as a Presidential Management Fellow at the National Institutes of Health.
Ohio Science Fair Alumni

The Ohio Academy of Science has appointed Dr. Lynn E. Elfner to chair a committee to develop SMART Goals in order to formalize a science day (fair) alumni and related youth science activities’ recognition and support group. If your academy has a similar group Lynn would like to hear from you about how you created the group. Elfner1@gmail.com.

SMART Goals are Specific, Measurable, Attainable, Relevant and Timely.

The program would engage and recognize alumni to support the Academy in the following ways: judges, reviewers, members and donors, government relations, marketing, and media relations. Alumni recruitment targets could include State Science Day (n=60,000), Buckeye Science and Engineering Fair (n= a few thousand), John H. and Ruth W. Melvin Scholars (n= a few hundred); Ohio Space Scientists of Tomorrow (n= 250); BiO (n= a few hundred); National Youth Science Camp (n= ca. 150); Young Buckeye STEM Scholars (n=100); B-WISER Institute (women in science camp) (n= 1,000+).

Oklahoma Academy of Science

The Oklahoma Academy of Science held its Fall Field Meeting at Black Mesa State Park in the far northwestern corner of the Oklahoma panhandle on September 26-28. Approximately 70 university faculty and students attended this event. Morning field trips (aquatic invertebrates, botany, ornithology, herpetology, and mammalogy) were led by the state’s experts across the park. Almost everyone made the 8-mile hike to the mesa summit, the highest point in Oklahoma during the afternoon. David Bass gave the evening presentation, discussing some of the highlights of his 30 years of aquatic invertebrate research in the Caribbean region. This meeting was a great low-key event where faculty and students mingled and had opportunities to learn more about natural history of a unique area of the state.

Planning for the Annual Technical Meeting are well underway, with registration beginning in late September. This year’s event will be at held at the University of Central Oklahoma in Edmon on November 8. Both oral and poster presentations will be made by professionals and university students throughout the day.

For information about OAS, check out the Academy’s web site at: http://www.oklahomaacademyscience.org/.

OAS Executive Director

David Bass
Envisioning Tomorrow’s Earth

Lee A. Brogie, AJAS Executive Director

(Continued from Page 1)

The site visit team is scheduled to visit Seattle, Washington in October. We are thrilled to be going to Seattle (our last conference there was in 2004) and are looking forward to working with the Washington State Academy of Science. Seattle, located on the Puget Sound in the Pacific Northwest, is Washington State’s largest city, the birthplace of The Boeing Company and Starbucks, and home to the world’s first gas station, first female mayor, and the first city in the US to play a Beatles song on the radio. Seattle’s iconic Space Needle was built in 1962 for the Seattle World’s Fair, Seattle’s Pier 52 is the busiest ferry terminal in the United States, and Pike Place Market is the longest continuously operating farmer’s market in the country.

The AJAS/NAAS conference hotel is the Sheraton Grand Hotel Seattle. The conference hotels and the Washington State Convention Center are within easy walking distance of each other.

On Wednesday, February 12th the registration table will open from 2:00-5:00 pm (all times are PST) and there will be a short meeting for Chaperones at 5:00 pm. We will officially kick-off our conference at 6:30 pm at our Opening Reception in the Sheraton Grand Ballroom. This is a time to relax, enjoy fine cuisine, rekindle friendships, and get to know your peers. A formal program will follow the reception.

Thursday, February 13th is TOUR day followed by the AAAS President’s Address, which includes a formal introduction of the AJAS student delegates to the AAAS meeting attendees, and the AAAS President’s Reception. Friday begins with the Breakfast with Scientists for the AJAS Fellows and invited scientists, and the Chaperone Appreciation Breakfast. Friday afternoon features the AJAS Poster Session and AAAS Plenary Lecture.

Oral presentations are scheduled for Saturday afternoon. Saturday evening includes the AAAS Plenary Lecture and the AJAS/NAAS Honors Banquet.

The 2020 AJAS/NAAS Conference registration newsletter is scheduled to be emailed the last week in October. On-line registration, abstract submissions and hotel reservations will begin at that time too.

Affiliated Science Academies…Please send me the names of the students who will be invited to attend the 2020 AJAS/NAAS Conference along with the names of their official chaperones. You can email the list to me at lee.brogie@academiesofscience.org. In addition, encourage your senior academy members who travel to Seattle for the AAAS Annual Meeting to visit students at the AJAS Poster Session and to attend the AJAS Oral Presentations.

Like us on Facebook: AJAS – American Junior Academy of Science


AJAS/NAAS – http://www.academiesofscience.org

AAAS Affiliated Science Academies - https://www.aaas.org/governance/aaas-affiliates#affiliated

AAAS – American Association for the Advancement of Science – http://www.aaas.org

Lee Brogie, AJAS Executive Director
SECTION Y NEWS

AAAS General Interest in Science and Engineering (Section Y)
Chair Patricia L. Ward

The annual conference of the American Association for the Advancement of Science will be held in Seattle, WA February 13-17, 2020. This conference promises to be especially compelling and relevant with the theme of Envisioning Future Earth.

Mark your calendars also for the Section Y Business Meeting to be held on Saturday, February 15, 2020.

During this meeting you’ll have a chance to meet the new AAAS Fellows from Section Y as well as new section officers and other steering group members. We will facilitate discussions among attending members to generate session ideas for the 2021 conference in Phoenix as well as solicit ideas from section members for plenary and topical lectures. We will also review processes and deadlines for session proposals as well as new fellow nominations. The section business meeting is a great opportunity to pitch new ideas and make connections with other section members. The 2019 business meeting was full of lively discussions and yielded a number of compelling ideas for session proposals and new collaborations. We look forward to hearing your ideas at the 2020 meeting.

The business meeting will also include a review of the section’s budget and an opportunity for members to hear from the Section Y AAAS Council Delegate.

Special highlight from the 2019 Business Meeting
The 2019 Section Chair Bruce Lewenstein recognized Don Jordan with a special tribute for his many years of service as Section Y Secretary. Several of the section members shared their appreciation and special memories of working with Don over the years. At the meeting Don remarked “I’ll be back!” and we hope that along with Don, you all will be joining us in Seattle.

Chair Patricia L. Ward - Museum of Science and Industry, Chicago
The Alabama Academy of Science had its 96th Annual Meeting Feb. 20-22, 2019 at Tuskegee University. Their next Annual Meeting will take place in the Spring of 2020. For information, contact: Executive Director email: Kramich@uab.edu

The Arizona-Nevada Academy of Science: Contact: Permanent Secretary Dr. Pedro Chavez: pchave@midwestern.edu

As a member of the Arkansas Academy of Science, you help Arkansas students obtain college degrees as well as support the advancement and diffusion of science in Arkansas. For information contact, President Dr. R. Panneer Selvam, Department of Civil Engineering, University of Arkansas, Fayetteville, AR 72701/(479)-575-5356 email: rps@uark.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 the 2019 AJAS/NAAS/AAAS Conference. We can not wait for the upcoming conference Feb. 12-16th, 2020 in Seattle, WA. 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://delawareshape.org/contact

The Florida Academy of Sciences, Inc. was founded in 1936 as a non-profit 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, noonan@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 2020 Annual Meeting will be held March 27-28th at Valdosta State University. Contact our 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. The Annual Meeting will be hosted by Illinois College April 3-4, 2020. For more information, contact our secretary, Rick Essner at ressner@siue.edu for details.

**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 135th Annual Meeting will be March 21st, 2020 at J.W. Marriott, downtown Indianapolis. Contact our Executive Director, Delores Brown, at (317) 974-0827 or ExecDir@indianaacadmyofscience.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 152nd Annual Meeting will be held April 3-4, 2020, at Baker University. Contact our Secretary, Sam Leung by emailing us at sam.leung@washburn.edu or by calling us at 785-670-2375.

**The Kentucky Academy of Science**: Our 2018 Annual Meeting was November 2-3, 2018 at Western Kentucky University, in Bowling Green. Kentucky and members presented more than 400 talks and posters over the two days. The 2019 Meeting will be November 1-2 at Berea College. Check us out at www.kyscience.org. For more information, contact us at executivedirector@kyscience.org or (859) 227-2837.

**The Louisiana Academy of Science** The 94th Annual Meeting will be held March 14th, 2020 at Louisiana State University. For information contact President John Doucet, Nicholls State University College of Arts and Sciences, Thibodaux, LA 70310, john.doucet@nicholls.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. For information, email Director Karen Gross, michiganacademy@alma.edu.

**Minnesota Academy of Science** Mission: To recognize, promote and influence excellence in science. For information, email contact@mnmas.org.

**The Mississippi Academy of Science** helps coordinate and organize scientific seminars and symposia in Mississippi. The 84th Annual Meeting will be held Feb. 20-21, 2020 at Biloxi Convention Center. For more information, email msacademyofscience@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 56th Annual Meeting will be April 24th & 25th, 2020 at Missouri Southern State University. For information, contact Business Manager Ginny McGhie, University of Central Missouri, W.C. Morris 132A, manager@missouriacadsci.org

**Montana Academy of Science**: For Information, contact President James G. Berardinelli, Ph.D., Montana State University Department of Animal and Range Sciences, Bozeman, MT 59117-2900, jgb@montana.edu

**North Carolina Academy of Science**: The 117th Annual Meeting will be held March 27-29, 2020 at Lenoir Rhyne University in Hickory, NC. For information about NCAS, contact Dr. Karen Guzman, Campbell University Department of Biological Sciences, P.O. Box 308, Buies Creek, NC 27517; Phone: (910) 814-4365; FAX: (910) 893-1887; Email: ncacadsci@gmail.com
North Dakota Academy of Science: The purpose of the Academy is to promote and conduct scientific research and to disseminate scientific knowledge. The Annual Meeting will be taking place April 3, 2020 on the campus of the State Capitol. 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. For information, email: ndas@ndacadsci.org.

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 129th NAS Annual Spring Meeting was April 12, 2019. Over 400 attendees observed nearly 240 abstract presentations during this year’s event. The 130th NAS Annual Spring Meeting occurred on April 17th, 2020, at Nebraska Wesleyan University. For information, contact nebacad@unl.edu.

New Jersey Academy of Science: The purpose of the academy is to stimulate education and research in science throughout New Jersey. The 65th Annual Meeting will take place May 2, 2020 at Kean University. For information about NJAS, visit us at Kean University, New Jersey Center for Science, Technology & Mathematics Education, 1000 Morris Ave., STEM Bldg. 5-13, Union, NJ 07083, or www.njas.org.

New Mexico Academy of Science: 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 nmas@nmas.org.

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 April 18th at Cleveland State University. For information, contact CEO Michael Woytek, info@ohiosci.org, www.ohiosci.org.

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. David Bass, Univ. of Central Oklahoma, 100 N. University Drive, Campus Box 90, Edmond, OK 73034, dbass@uco.edu, oklahomaacademyofscience.org.

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. In 2020, this meeting will take place in February at Portland State University. For information contact: Secretary: Jeff Duerr at jduerr@georgefox.edu, http://oregonacademyscience.org/

Pennsylvania Academy of Science: 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 96th Annual Meeting will be held at York College March 20-22, 2020. For more information visit our webpage at https://pennsci.org/, or contact President Ed Levy at epl1@psu.edu

The South Carolina Academy of Science (SCAS) was organized in 1924, and in 1927 the Academy affiliated with the American Association for the Advancement of Science. The Annual Meeting in 2020 will be March 28th at Furman University. For information contact: Secretary Janie Sigmon at jsigmon@yorktech.edu, Website: http://scacademyscsci.org/

South Dakota Academy of Science: Contact: Paul Johnson for details at paul.johnson@sdstate.edu, Website: http://www.sdaos.org/
<table>
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<tr>
<th>Academy Name</th>
<th>Description</th>
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<tr>
<td>Southern California Academy of Science</td>
<td>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 will be held May 8th, 2020 at California State University, Fullerton. For more information visit the website: <a href="http://scas.nhm.org/">http://scas.nhm.org/</a></td>
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<tr>
<td>Utah Academy of Sciences, Arts, and Letters</td>
<td>The University of Utah Annual Conference will be held March 13th, 2020 in Salt Lake City Utah. To find more information please contact: <a href="mailto:utahacademy@gmail.com">utahacademy@gmail.com</a> or visit: <a href="http://www.utahacademy.org/">http://www.utahacademy.org/</a></td>
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<td>Vermont Academy of Arts and Sciences</td>
<td>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 us at <a href="mailto:vanhoesenj@greenmtn.edu">vanhoesenj@greenmtn.edu</a>.</td>
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<tr>
<td>The Virginia Academy of Science</td>
<td>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: <a href="mailto:vasoffice@vacadsci.org">vasoffice@vacadsci.org</a> or call 804-864-1450.</td>
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<tr>
<td>Washington State Academy of Sciences</td>
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<td>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 95th Annual Meeting of WVAS will be held at Fairmont State University in Spring 2020. For more information contact Jeremy Keene at <a href="mailto:Jeremy.keene@glenvill.edu">Jeremy.keene@glenvill.edu</a> or visit: <a href="http://pwvas.org">http://pwvas.org</a></td>
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By Gloria J. Takahashi, SCAS Board, SCJAS Director.

SOUTHERN CALIFORNIA JUNIOR ACADEMY OF SCIENCE NEWS

Students Chosen to attend AJAS

Congratulations to our eighteen highly motivated and exceptionally hard working students in the 2018-19 SCAS-Research Training Program for high school students. They displayed and discussed the results of their academic year scientific research in the Poster Session at the 2019 SCAS May Annual Meeting held at California State University, Northridge. Ten students and one alternate were chosen by judges to attend the national AJAS meeting in Seattle, WA in Feb. 2020. The students will present their work in both Poster and Oral format in conjunction with the Annual Meeting of the American Association for the Advancement of Science (AAAS). They, their mentors and project titles are listed below:

*1) Samuel Buckley-Bonanno. Harvard-Westlake School, Los Angeles, CA
   Mentor: A. Nassar. Department of Physics and Astronomy, UCLA, Los Angeles, CA
   KNOWLEDGE AS POWER: THE ROLE OF MICROSTATE INFORMATION IN THE DETERMINATION OF AVAILABLE FREE ENERGY

*2) Stanley Liu. Arcadia High School, Arcadia, CA
   Mentors: N. Garg, Paul Yoo, Abe Lee. UC Irvine - Micro/Nano Fluidics, Irvine, CA Suraya Rasheed. USC, Los Angeles, CA
   AN INTEGRATED MICROFLUIDIC SYSTEM FOR BLOOD PLASMA SEPARATION AND DISEASE DIAGNOSTICS

3) Adolat Beshimova. Bravo Medical Magnet High School & USC STAR Program, Los Angeles, CA
   Mentors: B. Nakamura and L. Shao. Department of Medicine, Division of Gastroenterology and Liver Diseases, USC Keck School of Medicine, Los Angeles, CA
   CALPAINS 8 AND 9 ARE EXPRESSED IN THE MURINE INTESTINES AND REGULATED BY wnt3a IN COLON CANCER CELLS

4) Yeji Cho. Palos Verdes Peninsula High School, Palos Verdes, CA
   Mentor: A. Carillo. Cabrillo Marine Aquarium, Los Angeles, CA
   OPTIMIZATION OF A PHOTOSYNTHETIC MICROBIAL FUEL CELL

5) Sabrina Li. Walnut High School, Walnut, CA
   Mentors: B. Perog and D.C. Zacherl. Department of Biological Science, California State University, Fullerton, CA
   EFFECTS OF BAYCRETE TEXTURE AND TIDAL ELEVATION ON RECRUITMENT OF NATIVE OSTREA LURIDA AND NONINDIGENOUS BALANUS AMPHITRITE IN SAN DIEGO BAY, CA

*6) Patrick Kim. North Hollywood High School, Los Angeles, CA
   Mentors: J. Guiet and D. Bianchi. Department of Atmospheric and Oceanic Sciences, UCLA, Los Angeles, CA
   BIOMASS, DISTRIBUTION, AND DYNAMICS OF MESOZOOPLOANKTON IN THE CALIFORNIA CURRENT SYSTEM
7) **Anthony Morales.** Bravo Medical Magnet High School & USC STAR Program, Los Angeles, CA  
   **Mentors:** R. Gopalakrishnn, H. Matta, S. Choi, V. Natarajan, A. Jeronimo and P.M. Chaudhary. Norris Cancer Center, University of Southern California, Los Angeles, CA  
   **TOPANGA: A LUCIFERASE-BASED ASSAY FOR THE DETECTION OF CHIMERIC ANTIGEN RECEPTORS**

8) **Amrita Moturi.** Torrey Pines High School, San Diego, CA  
   **Mentor:** Y. Suzuki. J. Craig Venter Institute, La Jolla, CA  
   **CONSTRUCTION OF A CRISPR LIBRARY AND RNA SEQUENCING FOR THE CHARACTERIZATION OF GENE FUNCTION IN A MINIMAL SYNTHETIC BACTERIUM**

*9) **Emily Wesel.** Harvard-Westlake School, Los Angeles, CA  
   **Team members:** R. Ayyala and J. Castellanos. BIG Summer Program, Harvard Westlake School, Los Angeles, CA  
   **Mentors:** S. Mangul and E. Eskin. Department of Computer Sciences, UCLA, Department of Human Genetics, UCLA, Los Angeles, CA  
   **ANALYZING THE ADAPTIVE IMMUNE REPertoire DIVERSITY AND MICROBIOMES OF AFRICAN INDIVIDUALS**

10) **Wyan Wan.** Walnut High School, Walnut, CA  
    **Mentors:** M. Paig-Tran and A. Lowe. California State University, Fullerton, CA  
    **FUNCTION OF HYPEROSTOSES IN THE PTERYGIOPHORES OF THE OARFISH REGALECUS RUSSELLII**

11) **Alternate: Junhee Lee.** California Academy of Math and Science, Carson, CA  
    **Mentors:** D.A. Pace. California State University, Long Beach, CA  
    **A. Carrillo. Cabrillo Marine Aquarium, San Pedro, CA**  
    **EFFECT OF TEMPERATURE ON EMBRYONIC TO LARVAL DEVELOPMENT OF SAND DOLLARS DENDRASTER EXCENTRICUS**

* AJAS Fellow 2019

**2019-20 SCAS RTP**

The 2019-20 SCAS RTP began with 20 students accepted to work with scientists (mentors) on a “one to one basis” in the area of the students’ interests. Scientists from diverse southern California research institutions have made a wonderful commitment to help accelerate and introduce these highly motivated and talented high school students into the world of science research. Institutions include University of California at Irvine, J. Craig Venter Institute in La Jolla, USC’s Keck School of Medicine, and the Norris Cancer Institute, UCLA, Cabrillo Marine Aquarium, California State University at Long Beach, California State University at Fullerton, Los Angeles County Museum of Natural History, University of California, Riverside, California State College at Los Angeles, Catalina Marine Society, Occidental College and others.

The welcome-orientation meeting at Loyola Marymount University kicked off the academic year program with the first of three Saturday meetings on 9/7, with students, parents/visitors and committee members. Meetings at the Cabrillo Marine Aquarium and the UCI Air Pollution and Health Effects Lab will focus on scientific writing, oral presentation and scientific ethics as the year progresses. The second & third year students will be peer mentors for new students. At future meetings they will have in-depth interactions to discuss their research as well as have informal discussions with scientists from various science disciplines. All of this should reinforce the concept of the “scientific enterprise.” All students will present their results at the SCAS Annual Meeting in May 8, 2020 at CSUF. The cycle continues as judges will then choose exemplary students to attend the 2021 AJAS meeting in Phoenix, AZ.

Contact SCJAS at scas.nhm@gmail.com, website- scas.nhm.org/junior-academy  
-Submitted by: Gloria J. Takahashi, SCAS Board, SCJAS Director.
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http://www.academiesofscience.org/ajas-current-sponsors

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Peter and Elaine Faletra
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The DOD Junior Science and Humanities Symposia (JSHS)
Program Summary

58th National JSHS Symposium
April 15 – 18, Norfolk, VA Founders Conf Center

The Junior Science and Humanities Symposia (JSHS) program is jointly sponsored by the United States Departments of Army, Navy, and Air Force, in cooperation with leading research universities throughout the nation. The primary aims of JSHS are to promote original research and experimentation in science, engineering, and mathematics at the high school level, and publicly recognize students for outstanding achievement. The JSHS provides a forum for high school students to present the results of their original research. Students who participate in the Symposia also have the opportunity to meet and exchange ideas, interact with practicing researchers, and explore future academic and career opportunities.

The Department of Defense (DOD) JSHS program is run by National Science Teachers Association (NSTA) 1840 Wilson Blvd Arlington VA 22201. Karen Offringa is the National Director of JSHS programs. National JSHS where Students present in competition for scholarships and travel to the 58th April 15 – 18, Norfolk, VA Founders Conf Center.

JSHS Regions cover all 50 United States, the District of Columbia, Puerto Rico, and Department of Defense Schools in Europe and pacific. Student compete in their home region. For information: see www.jshs.org

The 2019 to 2020 DoD South Carolina Director is Dr. Don M. Jordan, College of Arts and Sciences, Center for Science Education, Coker Life Sciences Building, CLS 108, 715 Sumter Street c/o Biology Department, 4th Floor CLS, University of South Carolina, Columbia SC 29208. Phone: 803 777-7007 and email: djordan@sc.edu
Web: www.artsandsciences.sc.edu/cse. Other directors can be found at www.jshs.org