



## **WINTER 2022**

### **LEADERSHIP WORKSHOP**

**4-7 DECEMBER - VIRTUAL**

#### **PARTICIPANT & SPEAKER BIOGRAPHIES**



##### **HAL ALPER**

*University of Texas at Austin*

Dr. Hal Alper is the Kenneth A. Kobe Professor in Chemical Engineering and Executive Director of the Center for Biomedical Research Support at The University of Texas at Austin. He earned his Ph.D. in Chemical Engineering from the Massachusetts Institute of Technology in 2006 and was a postdoctoral research associate at the Whitehead Institute for Biomedical Research from 2006-2008, and at Shire Human Genetic Therapies from 2007-2008. Dr. Alper also serves on the Graduate Studies Committee for the Cell and Molecular Biology Department and the Biochemistry Department. He is currently the Principal Investigator of the Laboratory for Cellular and Metabolic Engineering at The University of Texas at Austin where his lab focuses on metabolic and cellular engineering in the context of biofuel, biochemical, and biopharmaceutical production in an array of model host organisms. His research focuses on applying and extending the approaches of synthetic biology, systems biology, and protein engineering. Dr. Alper has published over 130 articles and 8 book chapters. Dr. Alper is the recipient of the Camille and Henry Dreyfus New Faculty Award (2008), Texas Exes Teaching Award (2009), DuPont Young Investigator Award (2010), Office of Naval Research Young Investigator Award (2011), UT Regents' Outstanding Teaching Award (2012), Biotechnology and Bioengineering Daniel I.C. Wang Award (2013), Jay Bailey Young Investigator Award (2014), Camille Dreyfus Teacher-Scholar Award (2014), Society for Industrial Microbiology and Biotechnology Young Investigator Award (2015), ACS BIOT Young Investigator Award (2016), UT-Austin Emerging Inventor of the Year Award (2016) and AIChE Allan P. Colburn Award (2018), Biochemical Engineering Journal Young Investigator Award (2019), and Edith and Peter O'Donnell Award in Engineering (2019). He was elected as a Fellow to the American Institute for Medical and Biological Engineering in 2018 and to the National Academy of Inventors in 2019.



##### **MARTY APPLE**

*American Institute of Chemists*

Dr. Apple has pioneered areas of biochemistry, pharmaceuticals, artificial intelligence, sustainable agriculture, systems of systems science, behavioral economics, green chemistry, teacher education and medicine. He initiated a world pioneering research institute in molecular genetics to improve yield and nutrient quality of food plants, led a program to one of the first patented computer-assisted receptor-based drug designs, discovered new molecular tools to modify gene regulation, designed pioneering injectable systems for specific delivery of any drug to a designated specific tissue, designed, engineered and led a team that built the pioneering model of a pocket-size artificial kidney dialysis machine, initiated and led a special team into pioneering new cyber-security strategies, and managed – led several national scale long term NSF-funded studies of science teacher education. He was instrumental in the startup of five high tech companies.



**DAVID BALTENSPERGER**

*Soil Science Society of America*

Dr. David Baltensperger began his role as Professor and Department Head of Soil and Crop Sciences in October 2005 and recently completed serving his role as Interim Department Head for Ecosystem Science and Management. Baltensperger provides leadership and administration for a large comprehensive program of research, teaching and extension in the Department of Soil and Crop Sciences.

Baltensperger provides leadership and administration for a large comprehensive program of research, teaching and extension in the

Department of Soil and Crop Sciences.



**DEBORAH BRONK**

*Association for the Sciences of Limnology and Oceanography*

Dr. Deborah Bronk is the President and CEO of the Bigelow Laboratory for Ocean Sciences. She is an oceanographer who spent 23 years as a professor and researcher. She is also the past president of the Association for the Sciences of Limnology and Oceanography (ASLO), the past director of the Division of Ocean Sciences at the National Science Foundation (NSF), the current president-elect of The Oceanography Society (TOS), and a former chair, treasure and member-at-large of CSSP.



**MALCOLM BUTLER**

*Association for Science Teacher Education*

Dr. Malcolm B. Butler is Professor and Dean of the Cato College of Education at UNC Charlotte. Butler was born in Lafayette, Louisiana. He spent his childhood in south Louisiana with his eight siblings and loving mother, Adlean F. Butler, and father, the late Lee Butler, Jr. Butler earned a B.S. in in Physics from Southern University in Baton Rouge, Louisiana. He also completed an MEd and PhD in Curriculum and Instruction (Science Education) at the

University of Florida. Butler has taught and learned mathematics, science and life from elementary, middle, and high school students, as well as college students. He has been affiliated with several institutions of higher education, including the College of William and Mary, Texas and A&M- Corpus Christi, the University of Georgia, the University of South Florida, and the University of Central Florida. Some of his research interests include writing to learn in science, physics teacher education, and equity and diversity in science. Dr. Butler has secured over seven million dollars in funding to support his research and scholarly initiatives. He has presented his research findings and conducted workshops across the United States, as well as Canada, Japan, The Philippines, Singapore, Cyprus, South Africa and Botswana. He co-authored and co-edited three books and numerous book chapters and journal articles. He has served in leadership capacities in his profession, include board member of NARST (a global organization for improving science education through research) and Nap Ford Community Schools, Inc. (Orlando, Florida), chair of the board for the Council for Society Presidents, and president of the Association for Science Teacher Education.

**H. N. CHENG**

*American Chemical Society*

H. N. Cheng (B.S., UCLA; Ph.D. Univ. of Illinois at Urbana-Champaign) is 2020 President-Elect of American Chemical Society (ACS) and will serve as ACS President in 2021. He has been active in the ACS for many years and has served in leadership positions in numerous ACS committees and task forces. He works at USDA Southern Regional Research Center, where he is involved with sustainability and green chemistry as a product development platform. Prior to 2009, he was with Hercules Incorporated (now Ashland, Inc.) in Wilmington, Delaware, where he held various R&D and managerial positions.

**RALPH CLEVELAND**

*American Association of Blacks in Energy*

Ralph Cleveland was named President and CEO of the American Association of Blacks in Energy (AABE) in March 2022. He also serves as Senior Managing Director and CEO of Cleveland and Associates and he is the President and COO of S.L.King Technologies. Prior to these roles, Cleveland served four years as the Global Head of Customer Operations, Business Transformation, and Supply Chain for American International Group (AIG).

Cleveland has 35+ years of experience in the energy and infrastructure sector in various corporate and industry roles including responsibility for a broad range of centralized utility operations. He was also a member of the committee responsible for setting strategic policy and direction for a Fortune 1000 corporation. Within this corporation, Mr. Cleveland's experience extended to the Compliance Committee, the Foundation Board of Directors, and the Investment and Administrative Committees.

With over a decade of experience in oil and gas research, development, and production; natural gas processing; and petrochemical industries, in various engineering, operations, operations risk management, and line management roles Mr. Cleveland was asked to serve as a member the board of the National Energy Foundation and as an NPC Council Member of the National Petroleum Council. He is president and founder of the Capital and Enterprise Development Group, nonprofit endeavor which is dedicated to economic inclusion and socio-economic development.

Mr. Cleveland has been recognized as one of the Top 100 Most Influential Blacks in Corporate America by SaVoy Magazine and an Outstanding Georgia Citizen by the Secretary of the State of Georgia and was inducted into the Academy of Distinguished Engineering Alumni of the Georgia Institute of Technology.

A native of Macon, Georgia, Mr. Cleveland received his undergraduate degree in mechanical engineering from Georgia Tech, a post-graduate degree in mechanical engineering from Rice University and his master's degree in business administration from Tulane University.

**JIM CUDAHY**

*American Society of Agronomy*

Jim Cudahy was named the CEO of the Alliance of Crop, Soil and Environmental Science Societies (ACSESS) in May 2022. A seasoned association executive, Cudahy leads ACSESS's efforts to support three societies – the American Society of Agronomy, the Crop Science Society of America, and the Soil Science Society of America - in delivering on their missions for scientists and professionals in the agronomic, crop, and soil sciences.



Cudahy, a Certified Association Executive (CAE), has served in a variety of roles in professional and membership associations over the last 25 years, most recently as a managing director at Virtual, Inc. and previously holding roles as the President & CEO of the National Investor Relations Institute and the President & CEO of the National Court Reporters Association. In these roles, Cudahy implemented initiatives to increase association marketing and brand recognition, guided boards and governing bodies to develop and act on shared visions, and used his strategic vision and communication skills to move associations forward. Cudahy's extensive experience in effective association marketing, membership, and certifications will be a great asset to ACSESS.



### **CHRISTOPHER D'ELIA**

#### *Coastal & Estuarine Research Federation*

Christopher Francis D'Elia is an American marine scientist and biologist, known for his research on nutrient pollution by nitrogen. He is currently Dean and Professor at Louisiana State University College of the Coast and Environment and since 1992 has been an Elected Fellow of the American Association for the Advancement of Science.

D'Elia holds a bachelor's degree from Middlebury College and a Ph.D. from the University of Georgia. In 1989 he joined the University of Maryland faculty where he was director of the Sea Grant program and president of the Sea Grant Association. He led the Coastal and Estuarine Research Federation from 1991 to 1993, and in 1999 moved to the University of Albany as vice president of research. He later worked at the University of South Florida St. Petersburg where in 2007 D'Elia was appointed regional vice chancellor of students affairs and was in charge of all academic programs and stayed until 2009 when he joined the faculty at Louisiana State University.

In 2014 the University of Georgia Graduate School gave D'Elia their Alumni of Distinction Award.



### **JOHN DOWNING**

#### *Association for the Sciences of Limnology and Oceanography*

Dr. John Downing is the Director of the Sea Grant College Program, a research scientist at the Large Lakes Observatory on Lake Superior, and a professor in the Department of Biology at the University of Minnesota, Duluth. Dr. Downing is the former Chair of the Executive Board of the Council of Scientific Society Presidents and former President of the Association for the Sciences of Limnology and Oceanography.



### **KIM GARLAND-CAMPBELL**

#### *Crop Science Society of America*

Dr. Kim Garland-Campbell works for USDA-ARS in Pullman WA. Her research interests include wheat breeding and genetics, development of germplasm and cultivars that mitigate grower risk due to abiotic and biotic stress factors. The main areas of emphasis for her research include introgression of resistance to stripe rust of wheat, introgression of resistance to soil borne diseases especially strawbreaker foot rot, fusarium crown rot, and plant parasitic nematodes. Garland-Campbell also works on identification and manipulation of mechanisms of resistance to drought and cold and improvement of wheat end use

quality, specifically for club and soft white wheat. Additionally her research includes emphasis on statistical genetics and selection in breeding programs.

Dr. Garland-Campbell will begin her term as President-Elect of CSSA in January 2023



#### **JAMES GOODWIN**

*Center for Progressive Reform*

James Goodwin, J.D., M.P.P., is a Senior Policy Analyst with the Center for Progressive Reform. He has led the Center's Responsive Government program since 2008. His research focuses on strengthening the federal regulatory system, including by promoting public participation and scientific integrity in the rulemaking process.

Mr. Goodwin graduated magna cum laude from Kalamazoo College, where he received a B.A. with honors in Political Science. He received his law degree (with a certificate in environmental law) from the University of Maryland School of Law, where he graduated magna

cum laude, and his master's degree in public policy (concentration in environmental policy) from the University of Maryland School of Public Policy, where he graduated as class valedictorian. While at the University of Maryland School of Law, Mr. Goodwin was a member of the Moot Court team. He is a member of Order of the Coif and Phi Beta Kappa.



#### **MICHAEL GRUSAK**

*Crop Science Society of America*

Dr. Mike Grusak is a USDA, Agricultural Research Service scientist and the Center Director of the Edward T. Schafer Agricultural Research Center in Fargo, North Dakota. He leads a program consisting of five research units where scientists encompass expertise ranging from crop plants to insects to food safety. The Center's broad mission is to solve problems that will help farmers produce a safe, nutritious, and sustainable food supply. Prior to his appointment as Center Director in 2017, Dr. Grusak served as a Research Plant Physiologist at the USDA-ARS Children's Nutrition Research Center (CNRC) in Houston, TX and a Professor of Pediatrics at Baylor College of Medicine. He joined the CNRC in 1990 to develop an interdisciplinary

program to link plant science and production agriculture with human nutrition concerns. His research involves understanding ways to enhance the nutritional quality of plant foods for human or animal consumption. His group also has contributed to clinical investigations by providing stable isotope-labeled plant material to study nutrient bioavailability and metabolism in humans. Dr. Grusak received his Ph.D. in Botany from the University of California-Davis. His research has been funded by USDA, NSF, NIH, the US Agency for International Development, and the Bill and Melinda Gates Foundation. In 2016, he served as President of the Crop Science Society of America.



#### **TEE GUIDOTTI**

*Sigma Xi*

Tee L. Guidotti, MD, MPH is a physician-scientist with a consulting practice in occupational and environmental medicine, risk science, and sustainability, based in Washington D.C. and Ottawa under the name Occupational + Environmental Health & Medicine. He is a former President of Sigma Xi, the Scientific Research Honor Society and of the American College of Occupational and Environmental Medicine.



### **G. WARFIELD "SKIP" HOBBS**

*American Geosciences Institute*

G. Warfield "Skip" Hobbs is a professional geologist with 50 years of global petroleum, geothermal and mineral exploration and development experience. He is the managing partner of Ammonite Resources, a geotechnical and natural resource business advisory firm based in New Canaan, Connecticut. Prior to founding Ammonite in 1982, Hobbs worked internationally as an exploration geologist for Texaco and Amerada Hess. Hobbs holds a B.Sc. degree in Geology from Yale College, and a M.Sc. degree in Petroleum Geology from the Royal School of Mines, Imperial College, London. From 1982-1989 he was on the Board of Directors of the

Sierra Madre Foundation for Geological Research, an organization formerly sponsored by Yale, Harvard and Cornell Universities. Skip served as the American representative on the board of the Burgess Shale Geoscience Foundation in Field, British Columbia between 2002 and 2008. He was the elected Secretary (1993-1995) of the then 33,000 member American Association of Petroleum Geologists (AAPG) and was President of the AAPG Division of Professional Affairs in 2000-2001. Hobbs served from 2004-2012 on the Executive Committee of the American Geological Institute (AGI), a federation of 51 geoscience professional societies representing over 250,000 members in every earth science discipline. He was AGI President in 2010-2011. He is a registered professional geologist in the states of Texas and Pennsylvania. Skip is an external adviser to the Geosciences Department of the University of Connecticut. Hobbs is an Honorary Member of the American Association of Petroleum Geologists, and a Fellow of the Geological Society of America. In his spare time, he manages a family farm in Massachusetts where he raises organically grown vegetables, bees and grass-fed heritage beef cattle. He is the past-president of the Connecticut Agricultural Experiment Station Associates, and a past-president of the New Canaan Nature Center. Skip writes and lectures frequently on energy, energy economics, sustainability, and climate policy.



### **RUSSELL W. JESSUP**

*Texas A&M AgriLife*

Dr. Jessup served the US Army (1993-1995), completed his BS (Plant & Environmental Soil Science:1997) and PhD (Plant Breeding:2005) at Texas A&M University, held USDA-ARS post-doctoral (2005-2007) and commercial biofuel (2007-2009) positions, returned to Texas A&M University (2009), and was promoted to Associate Professor (2016).

His '**perennial grass breeding**' position combined departmental turfgrass and forage programs, added biofuels (2009), bioproducts (2015) and hemp (2020) into a '**biorefinery feedstock breeding**' program.

Jessup's research funding has exceeded \$7,000,000--US Departments of Energy and Agriculture, international partners, Texas agencies, and corporate sponsors (BP, Scotts-Miracle-Gro, USGA, Rare Earth Genomics). He has written 39 peer-reviewed journal articles, three book chapters, and was keynote speaker at the International Conference on Organic Farming, Biodynamics, and Modern Agriculture. Dr. Jessup's teaching exceeds 300 students annually across undergraduate and graduate courses on renewable bioproducts, intellectual property, and turfgrass science. He received the Excellence in Teaching Award (2013), chairs/co-chairs 7 current graduate students, and was the major advisor for 27 previous students. His service includes Honors Faculty, ATM Mentors, Maroon & White Mentors, Veteran Mentor (EBV; Battleground-to-Breaking-Ground), Honor Council, and MEPS leadership committees.



**PETER JUMARS**

*Association for the Sciences of Limnology and Oceanography*

Professor Emeritus of Oceanography at the School of Marine Sciences and the Darling Marine Center of the University of Maine. Past positions include the School of Oceanography at the University of Washington and the US Office of Naval Research. Author of more than 140 journal articles and book chapters and two books. Past elective offices include President of the Association for the Sciences of Limnology and Oceanography and Chair of the Council of Scientific Society Presidents.

**ROBERT KAY**

*Arup*

Robert Kay is Arup's Americas Climate and Sustainability Services Leader and a Principal in the Los Angeles office. Joining the firm in 2022, he brings 32 years of experience in climate change and coastal zone management. Prior to working at Arup, Robert served as the Deputy Director and Senior Fellow of ICF's Climate Center, helping clients embrace the climate transition.

Throughout his career, Robert has brought people together to solve complex problems. He is a sought-after facilitator and engagement specialist. He specializes in climate issues such as greenhouse gas emissions, sea level rise adaptation, and sustainable facilities

management. Since 2009, Robert has provided expert guidance to Pacific Island delegations to the UN Framework Convention on Climate Change (COP) including COP15 (Copenhagen), COP21 (Paris), COP22 (Marrakesh), COP23 (Bonn) and COP25 (Madrid and COP27 in Sharm El-Sheikh).

**LISA KEEFE**

*American Crystallographic Association*

Dr. Keefe is a biophysicist focusing on accelerating drug discovery through synchrotron-based structural biology. She is VP for Advancing Therapeutics at Hauptman-Woodward Medical Research Institute (HWI), and Director of the Industrial Macromolecular Crystallography Association – Collaborative Access Team (IMCA-CAT) at the Advanced Photon Source, Argonne National Laboratory. Through her leadership, IMCA-CAT has developed into a world-class research facility for the pharmaceutical industry.

**JINGBO LOUISE LIU**

*Chinese American Chemical Society*

Dr. J. Louise Liu received her Ph.D. from the University of Science and Technology Beijing in 2001 and completed her postdoctoral fellowship in the University of Calgary in 2004. She is the director of the Center for Teaching Effectiveness, tenured Full Professor at Texas A&M University (TAMU)-Kingsville in 2016 and affiliated with the TAMU Energy Institute. Her research covers nanostructured materials design, evaluation and applications in alternative energy and biological science. She hosted 15 visiting scholars, taught > 12,000 students; trained > 200 undergraduates and 60 graduate students. She served as the National Science Foundation

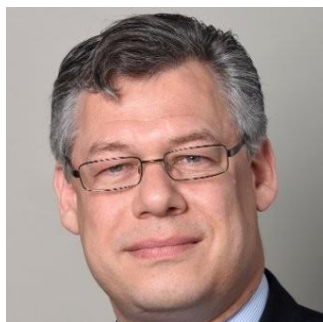
panelist & chair and reviewer of dozens of journals.

**YINGCHUN JASMINE LU***Chinese American Chemical Society*

Jasmine (Yingchun) Lu is currently the General Manager of Viwit Pharmaceuticals. Prior to joining Viwit in 2022, she was a Director of Alliance Management at Atomwise. She also worked for the US Innovation Center of Shimadzu, a top-five global instrumentation company, and AcceleDev, a US-Sino CDMO company, as the Director of Project Management. Her earlier careers included as a Senior Medicinal Chemist in Morphochem and Pharmacopeia Drug Discovery, focusing on drug discovery for oncology and immunosuppressants projects.

Jasmine is a life member of the Chinese American Chemical Society (CACS) and currently serves as National CACS President in 2022. She has served on the Board of its Tri-State Chapter since 2012 and was the Chair of 2019. She joined the American Chemical Society (ACS) in 1994 and served as an Alternate-Councilor in ACS North Jersey Chapter. She has also served on the Board of the NJ-ACS Mass Spectrometry Discussion Group and was the Chair of 2017.

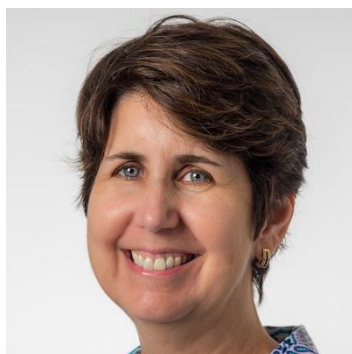
Jasmine holds a BS degree in Chemistry from Peking University, an MS from Southern Methodist University, and a Ph.D. in Organic Chemistry from Dartmouth College.

**CHRISTIAN MAUS***Bayer Crop Science – Germany*

Dr. Christian Maus is Entomology & Pollination Science Lead in the Department of Regulatory Scientific Affairs in the Crop Science Division of Bayer. He is steering research activities and collaborations with academia and other scientific institutions on the fields of entomology, biodiversity research, pollination science, ecology, ecotoxicology, and agronomy, with a focus on sustainable agriculture and its interface to biodiversity conservation. In his role, he is strongly engaged in stakeholder dialogue and

communicates about science topics in public lectures, panel discussions, and media interviews. He graduated on insect taxonomy in 1996, and made, after a research stay at Kansas University in 1997, his PhD in 2001 at the University of Freiburg (Germany) on the molecular evolution of insects. In 2000, Dr. Maus joined the Ecotoxicology Department of Bayer in Germany as Head of the Laboratory for Bees and Non-Target Arthropods, and subsequently held several positions in the Ecotoxicology Department as Product Responsible Scientist and later Global Lead Scientist for Bees, where he was in charge of ecotoxicological studies and risk assessment to determine pesticide safety to pollinators and other non-target organisms. In 2012, he was appointed as Global Pollinator Safety Manager at the Bayer Bee Care Center, and later Global Lead Scientist Bee Care at Bayer Crop Science, where he was leading all scientific activities of the Bayer Bee Care Program, with an emphasis on scientific collaborations and stakeholder dialogue on scientific topics. Dr. Maus has authored a broad range of scientific publications and book chapters on entomological, apicultural, and ecotoxicological topics. He represents Bayer in various scientific platforms and panels. From 2015 to 2019, he has been Chairman of the CropLife International Pollinator Issue Team. Currently, he is on the Stakeholder Advisory Boards of two EU Horizon 2020 Programs. In 2014 he was nominated as a Lead Author for the Assessment on Pollinators, Pollination and Food Production of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Dr. Maus is a Bayer Senior Science Fellow, and member of Bayer's Fellows Advisory Board which steers the Science Fellows Program of the company.





**LAURA MCCONNELL**

*Bayer U.S. LLC Crop Science Division*

Dr. McConnell is an analytical chemist with more than 25 years of experience in environmental and agricultural science research. She currently serves as a Principal Scientist in the Regulatory Scientific Affairs group at Bayer Crop Science in St. Louis, Missouri. Her role at Bayer focuses on communication, collaboration and engagement with the scientific community on topics relevant to the regulation of agricultural technologies.

Previously, she was a Research Chemist and Lead Scientist in the USDA-ARS where she specialized in the investigation of the chemical and physical processes controlling the environmental fate of agriculturally-relevant pollutants. A primary focus of her research was the development of improved conservation practices to mitigate pollutant transport and to provide ecosystem services.

Dr. McConnell has authored more than 100 peer-reviewed journal articles and has mentored many undergraduate students, graduate students and post-doctoral/visiting scientists. She has served on science-related advisory panels for the US Environmental Protection Agency and the European Food Safety Authority. She continues to collaborate with USDA and University of Maryland College Park colleagues where she has an adjunct research faculty appointment.



**SAMANTHA MILLER**

*Crop Science Society of America*



**SHARON MOSHER**

*American Geoscience Institute*

Sharon Mosher is Dean Emeritus of the Jackson School of Geosciences and Farish Chair and Professor Emeritus at The University of Texas at Austin. Her expertise is in structural geology and tectonics. She is a past President of the American Geoscience Institute and Geological Society of America, past Chair of the Council of Scientific Society Presidents, founder and past Board Chair of GeoScience World, an international journal aggregation, and 2020 Marcus Milling Legendary Geoscientist Medalist.

**SETH C MURRAY***Crop Science Society of America*

Seth Murray is the President-Elect of the Crop Science Society of America. Dr. Murray's research interests focus on improving the productivity, sustainability and quality of agricultural production through scientific research and development; mostly in maize. Graduate student training is deeply embedded in all of his research. He teaches a course on the history of and current topics in American agriculture each fall and a graduate course in Molecular Quantitative Genetics in Plant Breeding each spring. He is the founder and editor of "The Plant Phenome Journal", a Crop Science Society of America and Agronomy Society of America open-access society journal. He has served as the Agronomic Science Foundation Board Chair, and as an associate editor for Crop Science and the Journal of Plant Registrations for a combined 11 years. He formerly served on the executive committee of the National Association of Plant Breeders for six years, the inaugural North American Plant Phenotyping Network elected board, as C-1 Division Chair in CSSA, and as a scientific meeting organizer for meetings including the American Seed Trade Association CSS conference, the Texas Plant Protection Association, and the Genetics of Maize-Microbe Interactions Workshop.

**DIANE J. OKAMURO***National Science Foundation*

Dr. Diane Jofuku Okamuro is a Program Director for the Plant Genome Research Program Cluster at the National Science Foundation, Directorate for Biological Sciences (BIO), Division of Integrative Organismal Systems. The PGRP Cluster manages the Plant Genome Research Program (PGRP) which is broad in scope and supports functional genomics tool development and basic genome-scale discovery research that will provide new insights into plant processes that are important to the U.S. economy. The Cluster also manages the Plant Genome Research Postdoctoral Fellowships program which is part of the BIO-wide Postdoctoral Research Fellowships in Biology (PRFB) program. Dr. Okamuro received her Ph.D. in Biology from UCLA and is a plant molecular geneticist by training. She has broad-based experience in cutting-edge genomics technologies and has held research and management positions in both academia and industry prior to joining NSF in 2005.

**ADAM ROSENBERG***Energy Subcommittee of the House Committee on Science, Space, and Technology*

Adam Rosenberg is the Staff Director for the Energy Subcommittee of the House Committee on Science, Space, and Technology, which he joined in April 2013, and previously served as a professional staff member on the Committee from mid-2007 through 2010. In these roles, he was lead staffer in the House for the comprehensive set of enacted energy science and innovation provisions in the CHIPS and Science Act and the Energy Act of 2020, lead Democratic staff for the Department of Energy (DOE) Research and Innovation Act, enacted in 2018, and lead for several enacted energy research provisions in the Energy Independence and Security Act of 2007. Dr. Rosenberg holds a B.S. in applied & engineering physics from Cornell University and a Ph.D. in plasma physics from Princeton University, where he studied magnetohydrodynamic instabilities and interactions between radio frequency waves and energetic ions in a large magnetic fusion experiment at the Princeton Plasma Physics Laboratory. While an undergraduate, he also completed internships at Argonne National Laboratory and Lawrence Livermore National Laboratory.

From mid-2003 through 2004, Dr. Rosenberg was an American Association for the Advancement of Science (AAAS) Congressional Fellow on the Democratic staff of the Senate Energy and Natural Resources Committee, where he worked on improving the direction for advanced scientific computing research, support for the physical sciences, overall U.S. competitiveness in high technology industries, and a variety of other issues. He then accepted a position as a Program Manager in the DOE Office of Science's Fusion Energy Sciences Program, where he directly oversaw a major research facility at the Massachusetts Institute of Technology as well as several other research activities across the nation. Prior to his current position, Dr. Rosenberg served as Deputy Director for Technology Strategy in the Office of the Assistant Secretary of Defense for Operational Energy Plans and Programs. There he managed the coordination of the Department of Defense's joint activities with DOE to accelerate the development and deployment of advanced energy technologies for military applications. In addition, he served as the Assistant Secretary's lead staffer on alternative fuels policy and technical analysis.



### **STELLA SALVO**

*Crop Science Society of America*

As the Head of Breeding Partnerships for Smallholder Farming at Bayer Crop Science Dr. Stella Salvo works to collaboratively bring technologies that deliver a positive impact for farmers across the globe through modern agriculture and partnerships that increase agricultural productivity sustainably. She supports global teams that drive creative innovations in the areas of data science, genomics, phenomics and analytics. With over 20 years of experiences in plant breeding, leading discovery, deployment and across-function projects focused on capacity

building and development in Asia and Africa, Salvo is an enthusiastic influencer, creative people connector, and a diplomatic leader creating strategies that embrace the complexity of a dynamic workforce.



### **PATRICIA SIMMONS**

*National Science Teachers Association*

Patricia Simmons, Ph.D., works at the National Science Foundation as an expert in the Engineering Directorate. In addition, she is a volunteer and docent at the Smithsonian Institution National Air & Space Museum Udvar-Hazy Center and the National Museum of Natural History. Prior to this she as the Director of STEM Special Initiatives at the National Science Teaching Association. Simmons completed a Science & Technology Policy Fellowship through the American

Association for the Advancement of Science, working at the National Science. Academic positions have included Professor and Head of the Department of STEM Education at North Carolina State University, the Orthwein Professorship of Life-long Learning in the Sciences at the University of Missouri-St. Louis, Professor at the University of Georgia, and High School Science Teacher in Missouri. Much of her scholarship has focused on the role of technology as viable and valuable learning and research tools in science education, and more recently on policy in science and in STEM education. Her professional contributions include more than 200 publications and presentations at international and national meetings in science and STEM education (i.e., World Conference on Computers in Education, International Federation for Information Processing, Australian Science Education Association, AAAS, NARST, AERA, NCTM, among many others). Simmons was awarded over \$50 million in externally funded federal and private grants for research, teacher education, and education projects. Simmons served as Chair of the Council of Scientific Society Presidents, President of the National Science Teachers Association, and President of the Association for Science Teacher Education. She received awards for excellence in teaching and in science education at UGA (Lily Teaching Fellowship), UMSL (Outstanding Faculty), ASTE (Outstanding Science Teacher Educator), and NSTA (two Gustav Ohaus Awards for Outstanding College Science Teaching), and the NSTA Distinguished Service to Science Education.



**JENNIFER TANK***Society for Freshwater Science*

Dr. Jennifer Tank is the Galla Professor of Biological Sciences at the University of Notre Dame, and Director of the Notre Dame Environmental Change Initiative (ND-ECI). Dr. Tank is a biogeochemist and ecosystem ecologist who studies how nutrients and particles move through streams and rivers, with a focus on restoration and conservation efforts that improve the structure and function of flowing waters. Her research informs management and policy of freshwaters especially around water quality in agricultural landscapes.

**VAUGHAN TUREKIAN***National Academies Sciences, Engineering and Medicine*

Vaughan Turekian is the executive director of the National Academies' Policy and Global Affairs Division (PGA). Prior to joining the Academies, he served as the fifth science and technology adviser to the U.S. secretary of state. In this capacity, he advised the secretary of state and other senior State Department officials on emerging science, technology, and health matters affecting the foreign policy of the United States. He is currently the co-chair of the 10 member group of advisers to the U.N. secretary general on the role of science, technology, and innovation to advance the achievement of the Sustainable Development Goals. He has affiliations with Georgetown University School of Foreign Service and the University College London.

Previously, Turekian was chief international officer for the American Association for the Advancement of Science and the founding director of its Center for Science Diplomacy. In this capacity, he worked to build bridges between nations based on shared scientific goals, placing special emphasis on regions where traditional political relationships are strained or do not exist. In addition, Turekian worked at the State Department as a special assistant and adviser to the undersecretary for global affairs (2002 - 2006).

Turekian holds a B.S. in geology and geophysics and international studies from Yale University and an M.S. and Ph.D. from the University of Virginia, where he focused on the transport and chemistry of atmospheric aerosols in marine environments.

**APRIL ULERY***Soil Science Society of America*

Dr. April Ulery served as President of the Soil Science Society of America (SSSA) in 2021. She is a Professor of Soil and Environmental Science in the Plant and Environmental Sciences Department at New Mexico State University where she teaches and conducts research on phytoremediation and environmental soil chemistry and helps develop teaching animations that explain soil science concepts. Her research has been funded through the USDA, NASA, state agencies, and private companies. She earned her B.S. degree in Geology from the University of Redlands and her M.S. and Ph.D. degrees in Soil Science from the University of California, Riverside.

April is a Fellow of the SSSA and recipient of several teaching and mentoring awards. She has served on over 60 graduate student committees while at NMSU and mentored hundreds of undergraduates in Soil and Environmental Sciences.



## KRISTEN VEUM

*American Society of Agronomy*

Kristen Veum is the incoming President of the American Society of Agronomy. Dr. Veum is a Research Soil Scientist working with the USDA Agricultural Research Service. Her research examines how agricultural management systems impact soil function and a range of ecosystem services, such as carbon sequestration, crop productivity, nutrient cycling, and water quality. Her research also evaluates soil health indicators to improve our understanding of the advantages of conservation practices and to provide a science-based soil health interpretation framework for producers. Another focus area is development of rapid, in-field methods to make soil health assessment more accessible and affordable for all. Her research has demonstrated the soil health benefits of perennial vegetation, minimizing soil disturbance, and increased rotation diversity at the plot and field scales across the Midwestern United States. She served on the American Society of Agronomy Board of Directors, co-founded the ASA Soil Health Community in 2014, partnered with colleagues to form the Missouri Soil Health Consortium, and serves as a scientific advisor for multiple public and private soil health initiatives.

CSSP thanks its generous sponsors:



DIAMOND SPONSOR

**Bayer**



RUBY SPONSOR

**RARE EARTH  
GENOMICS**



SAPPHIRE SPONSOR

**Cotton  
Incorporated**



TOPAZ SPONSOR

**Ingredion.**

Be what's next.