

## **2020 WINTER** LEADERSHIP WORKSHOP 5-8 DECEMBER 2020 · VIRTUAL MEETING

# Participant and Speaker Biographies



Lara Alpan Bayer Crop Science

Lara Alpan serves as the Head of Science Outreach in the Breeding organization at Bayer. In this current role, Lara helps to accelerate the innovation and talent pipelines through strategic collaborations with universities, professional societies and innovative businesses. Lara has earned a MS in Biology from Southern Illinois University of Edwardsville and also holds a BS in Medicinal Sciences from the same university. Most recently, she

has lead science communications for the Breeding organization prior to her current role.



#### Daina Dravnieks Apple

Society of American Foresters

Daina Dravnieks Apple is a recent recipient of the Albert Nelson Marquis Lifetime Achievement Award, presented by Who's Who. Ms. Apple spent almost 40 years of her career with the United States Forest Service of the U.S. Department of Agriculture, in which she held many different roles, most recently as the director of knowledge, management, and communications. Apple began her

career at the U.S. Forest Service as an economist at the Pacific Southwest Research Station in Berkeley, California.

Currently serving as the planning commissioner for Benicia, CA, Ms. Apple celebrates many years' experience in her professional network, and has been noted for achievements, leadership qualities, and the credentials and successes she has accrued in her field. These achievements include her many roles working with the U.S. Forest Service Pacific Southwest Region, including as role as administrator of workplace relations, a policy analyst, a strategic planner of the Resources Planning Assessment staff, and as an assistant regulatory officer. Ms. Apple was a designated federal officer of the Forestry Research Advisory Council for the Secretary of Agriculture, and a member of the Society of American Foresters' Board of Forest Science and Technology.

Ms. Apple has been a member of multiple notable organizations. As a member of the Phi Beta Kappa Association she was commended with the Distinguished Service Award, having served as the national secretary following a term as the president of the Northern California Association. She was also a member of Ecological Society of America, the American Association for the Advancement of Science, the American Institute of Biological Sciences, the Washington, D.C. Academy of Sciences, the New York Academy of Sciences, and Sigma Xi.

A fellow of the National Capital Society of American Foresters, Ms. Apple acted as the chair of the society in 2000. She was honored as a Harvard Kennedy School Senior Executive Fellow.

A native of Kuldiga, Latvia, Ms. Apple spends her spare time enjoying ballroom dancing, tennis, film, and engaging in politics. She is married to Martin Apple and has one child, Almira Moronne.



#### Martin Apple

American Institute of Chemists

Dr. Apple has pioneered areas of biochemistry, pharmaceutics, 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 (SSSA)

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.

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#### **Mason Berry**

#### Alamo Remedy

Born on Texas soil and thankful for it. The family business is industrial infrastructure fabrication and construction founded in 1953 in Corpus Christi Texas operating today as Bay Ltd. My business is hemp, cannabis and Cannabinoid products. I support Agrilife.



#### Arden Bement

Purdue University

Arden L. Bement Jr. is the David A. Ross Distinguished Professor Emeritus of Nuclear Engineering, Purdue University. He was a joint professor of nuclear materials in the departments of Nuclear Science and Engineering and Material Science and Engineering at MIT from 1970-1976.

Working for the government, he was director of the Office of Materials

Science, DARPA, deputy undersecretary of defense for research and advanced technology, director of the National Institute of Standards and Technology (NIST), and director of the National Science Foundation (NSF).

In his industrial career, he was senior research fellow at the AEC Hanford Laboratories operated by General Electric Co., manager of the Metallurgy Research Department and Fuels and Materials Department at the Pacific Northwest National Laboratory operated by the Battelle Memorial Institute, and vice president for technical resources and chief technical officer for TRW.

Bement has received several national and international honors and distinctions. He is a member of the NAE, the American Academy of Arts and Sciences and a fellow of the American Association for the Advancement of Science.

He received the White House Distinguished Federal Executive Award, the Department of Defense Distinguished Civilian Service Medal, and the Department of Commerce William C. Redman Award.

Other awards of distinction include the Arthur M. Bueche Award from the National Academy of Engineering, Seven honorary doctorates from U.S and foreign universities, Honorary member of the graduate faculty of the Chinese Academy of Science, Imperial Order of the Rising Sun with gold and silver star, Government of Japan, and Chevelier, Legion d'honour, Government of France.



#### Andrew Bernat

Computing Research Association (CRA)

Andrew Bernat has been the Executive Director of the Computing Research Association since 2002. Prior positions include NSF Program Director and Professor and Chair of Computer Science at UTEP.



#### **Arthur Bienenstock**

Stanford University

Arthur Bienenstock is Special Assistant to the President for Federal Research Policy at Stanford University, where he also is Associate Director of the Wallenberg Research Link and a professor emeritus of Photon Science. Having been a Stanford faculty member since 1967, he has served as Vice Provost for Faculty Affairs (1972-77), Director of the Stanford Synchrotron Radiation Laboratory (1978-97) as well as Vice Provost and Dean of Research and Graduate Policy (2003-6). In Washington, he was Associate Director for Science of the

Office of Science and Technology Policy (1997-2001) and is a member of the National Science Board (2012-present). He is presently co-chair, with Peter Michelson, of the Committee on International Scientific Partnerships of the American Academy of Arts and Sciences. Bienenstock was president of the American Physical Society in 2008 and chaired the Council of Scientific Society Presidents in 2010.



#### Sarah Bowman

American Crystallographic Association

My research interests include developing new methods for crystallization of biomolecules, new methods for detection of nanocrystals, and new methods for in situ X-ray data collection. My research lab is interested in developing new methods that combine crystallographic and spectroscopic approaches to answer fundamental questions about protein biochemistry, especially in proteins that contain metals. We are working to

develop spectroscopic methods for single crystals (electron paramagnetic resonance, UV-visible microspectrophotometry, and energy dispersive X-ray spectroscopy for elemental analysis) to be used in parallel with crystallography. My lab is especially interested in investigating proteins that are important in neurodegenerative diseases.



#### **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), and a former chair, treasure and member-at-large of CSSP.



**Sylvie Brouder** American Society of Agronomy

Sylvie Brouder (PhD, Ecology, University of California-Davis; Professor of Agronomy) research addresses nutrient stewardship in agricultural landscapes and application of emerging digital tools and novel statistical approaches to improve data use for evidence-based recommendations and policy in a changing climate. She is Director of the Water Quality Field Station, an in-field laboratory and Purdue University Core Facility. She currently serves as President for the American Society of Agronomy (ASA). She was elected ASA Fellow (2005), named a Purdue Wickersham Chair of Excellence in

Agriculture Research (2012), and elected Fellow of the American Association for the Advancement of Science (2017).



#### **Malcolm Butler**

Association for Science Teacher Education

Malcolm B. Butler, Ph.D., is Professor of Science Education in the School of Teaching, Learning and Leadership at the University of Central Florida, in Orlando. In addition to his faculty role, Dr. Butler is also Program Coordinator for the Bachelors and Masters Programs in Secondary Science Education. He is the current President of the Association for Science Teacher Education (ASTE), an international organization for professionals who are involved in the preparation and development of teachers of science at all levels. His teaching

and research interests include multicultural science education, science and underserved students, K-12 pre-service and in-service science teacher education, environmental education and physics education. His work has been published in journals such as the Journal of Research in Science Teaching, the Journal of Science Teacher Education, Science Activities, the International Journal of Environmental and Science Education, and the Journal of Multicultural Education. His teaching and research have been generously supported by the National Science Foundation, the Environmental Protection Agency and the US Department of Education. Dr. Butler is also one of the authors of National Geographic Learning's National Geographic Science, and Exploring Science, two national elementary science curriculum programs, as well as the book, Teaching Science to English Language Learners, published by Routledge.



Jon Cardinal Office of U.S. Senator Charles E. Schumer

Jon is currently Director of Economic Development for United States Senate Democratic Leader Charles E. Schumer. He advises Leader Schumer on various economic and community development policy areas, manages the Senator's relationships with CEOs and the broader private sector, and leads an outreach operation that implements the Senator's economic development goals. Jon previously served in a similar role for more than a decade with U.S. Senator Kirsten Gillibrand, and prior to joining Senator Gillibrand's office, Jon was an aide on

the staff of former U.S. Senator Hillary Rodham Clinton.



# William Carroll

American Chemical Society

Dr. William Carroll, Jr. holds a Ph.D. from Indiana University where he is currently an Adjunct Professor of Chemistry. He recently retired as Vice President of Industry Issues for Occidental Chemical Corporation and after 37 years in the chemical industry, he now heads his own company, Carroll Applied Science. Bill is a Past President (2005) and Chair of the Board (2012-14) of ACS, a Fellow of the Royal Society of Chemistry, and member of a number of committees for the

National Research Council. In 2009, he was chair of the Council of Scientific Society Presidents. On behalf of OxyChem he has chaired numerous committees for industry associations, including the American Chemistry Council and has served on expert groups commissioned by the United Nations Environment Programme. He holds two patents, and has more than 70 publications in the fields of organic electrochemistry, polymer chemistry, combustion chemistry, incineration and plastics recycling.



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.



Jeffrey Cohen INFORMS

Jeff Cohen is an accomplished organizational leader and strategic communication executive with a rich background of crafting effective visions and strategies across a variety of sectors and industries that maximize growth, and enhance mindshare and market positions.

As Director of Public Affairs and Marketing for INFORMS, Jeff serves on the senior leadership team for the largest trade association of data science professionals, heading all aspects of the organization's communication, marketing, and government relations activities.

Over the course of his career, Jeff has held a variety of roles with public relations and public affairs firms, businesses, and trade associations. He has also served as a senior advisor to numerous federal, state, and local political candidates and committees, as Chief of Staff for a Member of Congress, and as Press Secretary for a U.S. Senator.

Jeff earned his MBA from Johns Hopkins University, an MA from The George Washington University, and his BA from Ithaca College.



#### **George Corcoran** Academy of Toxicological Sciences

George Corcoran: Professor and Chair, Pharmaceutical Sciences, Wayne State University. Academy of Toxicological Sciences Fellow and Past Executive Board Member, EPA and NTP Scientific Advisory Boards. Past President Society of Toxicology (7,000 members, 60 countries), CSSP Executive Board Member and Chair, ASPET Scientific Council Member. Expert in safety of drugs, chemicals, alcohol, impairing agents. Research focuses on liver and kidney damage, and governing factors including metabolism, kinetics and nutrition.



# Neil Desnoyers

Neil Desnoyers has been teaching at Saint Joseph's University in Philadelphia since 2015. Neil's teaching responsibilities include Business Analytics and Information Systems courses. Neil previously taught full-time as an instructor at Drexel University for eight years after receiving his MS and MBA degrees, also at Drexel. Prior to that, Neil worked for 12 years in both the financial services and manufacturing industries. Neil's current research is

focused on the volunteer labor assignment problem in the field of operations research.



#### John Downing

Association for the Sciences of Limnology and Oceanography and Minnesota Sea Grant

John Downing is Director of Minnesota Sea Grant College Program, and a past-president of the Association for the Sciences of Limnology and Oceanography (ASLO). As a past Chair of the CSSP Executive Board he participated in visits to Congress on behalf of CSSP and as a member of the Consortium of Aquatic

Science Societies. He was a Regent's Excellence Professor of Ecology, Evolution, and Organismal Biology, and the Department of Agricultural and Biosystems Engineering at Iowa State University.



#### Barb Dutrow

Geological Society of America

Professor Barb Dutrow is a geoscientist specializing in mineralogy and metamorphic petrology at Louisiana St. Univ. Currently she is President-elect of the Geological Society of America (2021), a Past-President of the Mineralogical Society of America (2007), and is on the Board of Governors of the Gemological Institute of America (2016--2025; chair of Governance Committee).



**Joseph "Joe" Ferrara** *American Crystallographic Association* 

Dr. Ferrara received his Doctorate degree from Case Western Reserve University in Cleveland, Ohio. Upon completing his doctorate in 1987, he joined Molecular Structure Corporation, which became a subsidiary of Rigaku Corporation in 1996. Dr. Ferrara has spent the last 33 years developing tools for X-ray crystallography for the research community. Dr. Ferrara has also developed tools for X-ray Computed Tomography and

X-ray Photon Correlation Spectroscopy. He currently is funded by the National Institute of Biomedical Imaging and Bioengineering to develop a phase based X-ray imaging system.



#### Kevin FitzGerald Creighton University

Kevin T. FitzGerald, S.J., Ph.D., Ph.D., is the John A. Creighton University Professor, and chair of the Department of Medical Humanities in the School of Medicine at Creighton University. He received a Ph.D. in molecular genetics and a Ph.D. in bioethics from Georgetown University. His research efforts focus on the utilization of reflection in medical education, on the investigation of abnormal gene expression in cancer, and on ethical issues in biomedical research and medical genomics. He has published educational, scientific, and ethical articles in

peer-reviewed journals, books, and in the popular press.

Fr. FitzGerald has given presentations nationally and internationally and has often been interviewed by the news media on such topics as human genetic engineering, cloning, stem cell research, and personalized medicine. He is a founding member of Do No Harm, a member of the ethics committee for the March of Dimes, and a member of the Genetic Alliance IRB. In addition, he currently chairs the Ethics Advisory Council for the Geisinger Health System MyCode biobank project, which includes a Return of Results process for exome sequencing of project participants.

In addition, Fr. FitzGerald has been a corresponding member of the Pontifical Academy for Life since 2005 and a consultor to the Pontifical Council for Culture since 2014.



William Furiosi High School Teacher, Oviedo High School

William Furiosi is an AP Biology, Chemistry, and Research teacher at Oviedo High School in Seminole County, FL. He has been teaching at Oviedo for the past 8 years. This past year, he was named as Seminole County Public Schools Teacher of the Year, which is just outside the top 50 largest school districts in the United States.

Originally aspiring to become a physician, after graduating at the top of his class from the University of Central Florida, he took a refund from his medical admissions exam and used it to become a teacher. Since arriving at Oviedo High School,

Mr. Furiosi's students have routinely placed among the top in the district, state, and country. His students boast nearly a 90% pass rate on the AP Biology exam, which far exceeds district and national averages (64%). As the head of the Oviedo Science Research program, he has helped sponsor or mentor 55 pre-collegiate research projects where 85% have earned awards at the regional level and almost half of his district's nominations to the state competition. His students have also gone on to win at the state and international level including a Best-in-Show at the Florida State Science & Engineering Fair and multiple category awards at the Intel International Science & Engineering Fair.

His inspiration for teaching is seeing students learn authentically and through a scientific lens the trial and error for which the scientific discipline is so well known. It is through these challenges that the deepest, most meaningful learning occurs.



# Elena Gertsmann

Elena is the Executive Director of INFORMS, the leading association for operations research and analytics professionals. Prior to INFORMS, Elena was on the senior executive team at the American Society of Mechanical Engineers (ASME) where she was responsible for strategy and planning, volunteer leadership development, corporate communications, international relationships and board relationships and operations. Before being recruited to ASME, she was an executive with IEEE, the world's largest professional association for the advancement of technology.

Elena is a committed leader within the association industry. She has served on many volunteer boards/committees, including serving on the ASAE Board of Directors, chairing the ASAE Fellows Committee, co-chairing the CESSE annual conference and chairing the ASAE Research

Committee. She is routinely called upon to provide expert advice on research techniques, methodology and data interpretation. In addition, she has been called a "strategy guru" and has had success helping boards and executive teams come together to form strategies that guide the organization for years. In 2014, she was selected as one of four ASAE Fellows, a designation bestowed on fewer than 1% of ASAE members. Elena received her doctorate degree from Rutgers University in Social Psychology.



**Darío Gil** Director of IBM Research

Dr. Darío Gil is the Director of IBM Research, one of the world's largest and most influential corporate research labs. He is the 12th Director in its 75-year history.

IBM Research is composed of over 3,000 researchers at 19 locations on six continents advancing the future of computing. Dr. Gil leads innovation efforts at IBM, directing research strategies in areas including AI, cloud, quantum computing, and exploratory science. Under his leadership IBM was the first

company in the world to build programmable quantum computers and make them universally available through the cloud.

An advocate of collaborative research models, Dr. Gil co-chairs the MIT-IBM Watson AI Lab, which advances fundamental AI research to the broad benefit of industry and society. He also co-chairs the COVID-19 High-Performance Computing Consortium, which provides access to the world's most powerful high-performance computing resources in support of COVID-19 research.

Dr. Gil is a Trustee of the New York Hall of Science, and is a member of the National Science Board (NSB), the governing body of the National Science Foundation (NSF). Dr. Gil received his Ph.D. in Electrical Engineering and Computer Science from MIT



#### **Nick Goeser**

American Society of Agronomy, Crop Science Society of America, Soil Science Society of America

#### Michael Grusak Crop Science Society of America

Dr. Mike Grusak is a USDA, Agricultural Research Service scientist and the Center Director of the Red River Valley 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 Guiodotti

Sigma Xi

Past President, Sigma Xi. Occupational and environmental medicine. Retired from George Washington University. Most of career at the University of Alberta. Fulbright Visiting Professor at the University of Ottawa 2015. B.S. Biological Sciences at the University of Southern California, M.D. University of California at San Diego, postdoctoral research

National Institutes of Health, trained in internal medicine, pulmonary medicine, and occupational medicine and got his MPH (public health) at Johns Hopkins.



#### **Florencio Hernandez**

UCF - College of Community Innovation & Education

Hernández is a Professor of Chemistry & Optics at the University of Central Florida. He is a servant leader with high integrity who believes in the importance of trust and transparency, the power of listening attentively, and the value of building teams and delegating. Hernandez has completed the Academic Leadership Academy, Chairs and Directors Program, and Provost Faculty Fellow, and is serving as the Chemistry graduate Coordinator, Vice-President of the Faculty and Staff Association, and the Interim Associate Dean of Research of the College of Community Innovation and Education, at UCF.



#### G. Warfield "Skip" Hobbs

American Geosciences Institute

G. Warfield "Skip" Hobbs is a geologist and the managing partner of Ammonite Resources, a global energy and mineral resource consulting firm which he founded in 1982. He is a Fellow of the Geological Society of America, Honorary Member of the American Association of Petroleum Geologists, and served as president of the American Geoscience Institute in 2011. Skip is an alumni member of the CSSP and the chairman of the CSSP Committee on Government and Public Affairs.



# Lucinda Johnson

Society for Freshwater Science

Dr. Lucinda Johnson was President of Society for Freshwater Science (2010-2011); she is an aquatic and landscape ecologist whose research is at the intersection of science, policy, and management. Johnson serves on the Bd of CSSP, the Intl Joint Commission's Sci Adv Bd, and the EPA's Board of Scientific Counselors, and was recently

appointed to the Minnesota Governor's Climate Change Advisory Council. Dr. Johnson is Dir of Research at the Natural Resources Research Inst of the Univ of Minnesota Duluth.



#### **Erin Jones**

Bayer U.S. LLC., Crop Science Division

Erin Jones currently serves as Head of Sustainability & Outreach and is a member of the Plant Breeding Leadership Team for the Crop Science division of Bayer. Based in St. Louis, Missouri, Erin's team is focused on cultivating an understanding of breeding innovations and strengthening the positive environmental and societal impact of our business in agriculture.

Erin holds a MS in Crop Science from the University of Illinois in Champaign, IL, a MBA from Webster University in St. Louis, MO, and a BS in Agriculture and Education from Wilmington College in Wilmington, Ohio. In her spare time, Erin is a member of the Young Friends Board at the Danforth Plant Science Center in St. Louis, and enjoys traveling and hiking with her dog, Petey.



**Seth Kahan** *Visionary Leadership Academy* 

Seth Kahan is widely recognized as being on the forefront of visionary leadership. He has served as a trusted advisor to more than 100 association CEOs and world-class leaders including the president of the World Bank, director of the Peace Corps and senior managers at Royal Dutch Shell. Today Kahan is a sought-after business strategy specialist and convener of Grand Challenges, big, bold goals that take on socially intractable problems through world-class partnerships. Kahan worked at the World Bank for 13 years where he helped

spearhead Knowledge Management, which went from 0 to \$60 million in two short years. That launched his career in global organizational change.

He served as a director on the board of the American Geophysical Union for two terms, as well as the boards of the Council of Better Business Bureaus and the Columbia Lighthouse for the Blind. He is the author of four books including the business bestseller, Getting Change Right: How Leaders Transform their Organizations from the Inside Out and Getting Innovation Right: How Leaders Leverage Inflection Points to Drive Success. His most recent is, Visionary Leadership: How Association Leaders Embrace Disruption in the 21st Century.

Kahan leads the Visionary Leadership Academy and runs the Visionary CEO Community, dedicated to helping leaders build tomorrow's organizations today.

He is an advocate of science and science-based leadership. He has presented his original content for leadership institutes including the World Bank, CIA, FEMA, USGS, NASA's Goddard Space Flight Center, and the Department of Education.



#### Lisa Keefe

American Crystallographic Association

Dr. Keefe is a biophysicist whose work focuses on accelerating drug discovery through synchrotron-based structural biology. She is Vice President for Advancing Therapeutics at the Hauptman-Woodward Medical Research Institute (HWI) in Buffalo, NY, and Director of the Industrial Macromolecular Crystallography Association – Collaborative Access Team (IMCA-CAT) located at the Advanced Photon Source, Argonne National Laboratory in Illinois. Through her

leadership, IMCA-CAT has developed into a world-class research facility for the pharmaceutical industry.



#### Pinar Keskinocak INFORMS

Pinar Keskinocak is the William W. George Chair and Professor in the H. Milton Stewart School of Industrial and Systems Engineering at Georgia Tech. She is also co-founder and director of the Center for Health and Humanitarian Systems. Previously, she served as the College of Engineering ADVANCE Professor and as interim associate dean for faculty development and scholarship. Prior to joining Georgia Tech, she worked at IBM T.J. Watson Research Center. She received her Ph.D. in Operations Research from Carnegie Mellon University, and her M.S. and B.S. in

Industrial Engineering from Bilkent University.

Dr. Keskinocak's research focuses on the applications of operations research and management science with societal impact, particularly health and humanitarian applications, supply chain management, and logistics/transportation. Her recent work has addressed infectious disease modeling (including Covid-19, malaria, Guinea worm, pandemic flu), evaluating intervention strategies, and resource allocation; catch-up scheduling for vaccinations; hospital operations management; disaster preparedness and response (e.g., prepositioning inventory); debris management; centralized and decentralized price and lead time decisions. She has worked on projects with companies, governmental and non-governmental organizations, and healthcare providers, including American Red Cross, CARE, Carter Center, CDC, Children's Healthcare of Atlanta, Emory University, and Intel Corporation.

She is an INFORMS Fellow and currently serves as the president of INFORMS. Previously she served as the Secretary of INFORMS, a department editor for Operations Research (Policy Modeling and Public Sector area), associate editor for Manufacturing & Service Operations Management, and INFORMS Vice President of Membership and Professional Recognition. She is the co-founder and past-president of INFORMS Section on Public Programs, Service, and Needs, and the president of the INFORMS Health Applications Society.



## Ross David King

Chalmers University

Ross D. King is Professor of Machine Intelligence at the Chalmers University, Sweden; and a Director of Research at the University of Cambridge, UK. His first degree was a B.Sc. in Microbiology (Aberdeen), he then did an M.Sc. in computer science (Newcastle),

and his Ph.D. at the Turing Institute applying machine learning to bioinformatics. He has worked at the interface between AI and science for over thirty-five years. He originated the idea of a 'Robot Scientist': integrating AI and laboratory robotics to physically implement closed-loop scientific discovery, and his Robot Scientist 'Adam' was the first machine to autonomously discover scientific knowledge. His second Robot Scientist 'Eve' was designed to find drugs for neglected tropical diseases, and has found lead compounds against malaria. He is currently building a third-generation Robot Scientist 'Genesis' that will be able to execute 10,000 hypothesis-led cycles of experiment in parallel about yeast systems biology. His other core research interest is DNA computing. He developed the first nondeterministic universal Turing machine, and is now working on 'DNA supremacy': a DNA computer that can solve larger NP complete problems than electronic or quantum computers. He is also very interested in computational economics and aesthetics.



#### Neal Lane

Rice University Baker Institute for Public Policy

Dr. Neal Lane is the Senior Fellow in Science and Technology Policy at Rice University's Baker Institute for Public Policy and holds the titles of Malcolm Gillis University Professor Emeritus and Professor of Physics and Astronomy Emeritus at Rice University. Prior to returning to Rice University in January 2001, Dr. Lane served in the Bill Clinton Administration as Assistant to the President for Science and Technology and Director of the White House Office of Science and Technology

Policy (1998-2001), and before that as Director of the National Science Foundation (1993-98). He was Rice's Provost and Professor of Physics prior to his time in Washington. He has also served as Chancellor of the University of Colorado at Colorado Springs (1984-86). He received his B.S. (1960), M.S. (1962) and PhD (1964) in physics from the University of Oklahoma. His thesis advisor was Dr. Chun C. Lin (currently at the University of Wisconsin - Madison). Lane is a Fellow of the American Academy of Arts and Sciences and has been awarded over a dozen honorary degrees and received several other honors, including in 2009, the National Academy of Sciences Public Welfare Medal, the American Institute of Physics K.T. Compton Medal for Leadership in Physics and the Association of Rice Alumni Gold Medal for service to Rice University. In 2011 he received the Distinguished Friend of Science Award from the Southeastern Universities Research Association (SURA). In 2013 he received the Vannevar Bush Award from NSF's National Science Board. In 2015 he received the Lifetime Achievement Award from the University of Colorado at Colorado Springs. And in 2019, he received a Broader Impacts Champion award from the Center for Advancing Research Impact in Science (ARIS) as well as the Oklahoma City Public Schools Wall of Honor Award, presented by the Oklahoma City Public Schools Foundation. He belongs to a number of professional associations and has served on several boards and advisory committees. Neal and his wife, Joni, have two children, John Lane and Christy Saydjari – both graduates of Rice University – and four grandchildren, Matthew and Jessica Lane, and Alex and Allia Saydjari.



#### **Roxane Maranger**

Association for the Sciences of Limnology and Oceanography

Roxane Maranger is currently the President of the Association of the Sciences of Limnology and Oceanography (ASLO) and a professor in aquatic ecosystem ecologist at the Université de Montréal, the second largest French Language university in the world. ASLO has around 4000 members from 70 countries, and focuses on both marine and freshwaters- from streams to the open ocean which is unique. Her own research program generally addresses how diverse anthropogenic pressures influence water quality.



#### **Carl McClary**

AAFS - American Academy of Forensic Sciences

Carl McClary is the current President-Elect of the American Academy of Forensic Sciences (AAFS). He has been involved in the field of forensics for over 25 years, beginning as a forensic document examiner with the South Carolina Law Enforcement Division and currently with the Bureau of Alcohol, Tobacco, Firearms, and Explosives Forensic Science Laboratory in Atlanta, Georgia.



#### 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 CropScience 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.



#### **Susanne Menden-Deuer**

Association for the Sciences of Limnology and Oceanography (ASLO)

As a seagoing oceanographer and plankton ecologist, I focus my research efforts on examining how microscopic organisms affect the biogeochemistry of the ocean, particularly predator prey interactions of singled celled eukaryotic microplankton. After receiving a 'Diploma' in Biology from the University of Bonn, with research done at the Alfred Wegener Institute in

Bremerhaven, Germany, I pursued M.Sc. and Ph.D. degrees in Oceanography at the University of Washington. I served as lecturer at Western Washington University's Shannon Point Marine Center in their 'Minorities in Marine Science Undergraduate Program' aimed at enhancing diversity in Marine Science followed by a stint as research fellow at Princeton University. Since 2008 I have been a faculty member at the Graduate School of Oceanography at the University of Rhode Island. Besides the fundamental research my lab conducts, I am involved in national and international collaborative efforts to understand ocean ecosystem function and I contribute through serving as Associate Editor for the journals Limnology and Oceanography as well as Ecosystems. Because the research topics I study have direct impacts on the habitability of planet Earth and the health and happiness of people, I feel strongly that humans should know that their microbial plankton pals are essential to their survival. Thus, science communication, including through art has been an important part of my efforts.



#### Ashley Moerke

Society for Freshwater Science

I am serving as the President-elect of the Society for Freshwater Science, a 2,000 member international scientific organization whose purpose is to promote further understanding of freshwater ecosystems and ecosystems at the interface between aquatic and terrestrial habitats. I also am a full professor at Lake Superior State University (LSSU) and I am the Director of LSSU's new Center for Freshwater

Research and Education (www.lssu.edu/cfre). My research interests are focused on the ecology and conservation of freshwater fisheries and aquatic ecosystems in the Great Lakes basin.



Michael H. Moloney American Institute of Physics

Michael Moloney is the ninth CEO of the American Institute of Physics (AIP), a federation that advances the success of our 10 Member Societies and an institute that supports the physical sciences enterprise. Previously Moloney was Director for Space and Aeronautics at the U.S. National Academies of Sciences, Engineering, and Medicine, where he spent 15 years working on over 100 reports across a diverse set of scientific, engineering and technical fields. Moloney also spent 7 years as an Irish foreign

service officer. He earned his PhD in physics from Trinity College Dublin.



#### Sharon Mosher

American Geoscience Institute

Dr. Sharon Mosher is the William Stamps Farish Chair and Professor at The University of Texas at Austin and was Dean of the Jackson School of Geosciences for over a decade. She was President of the American Geoscience Institute (AGI), President of the Geological Society of America (GSA), and Chair of the Council of Scientific Society Presidents. She is a founder and past Chair of the Board for GeoScienceWorld, an international journal aggregation for geoscientists. She is the 2020 Marcus Milling Legendary Geoscientist Medalist awarded by the American Geoscience Institute.



**Dennis Ojima** Ecological Soeciety of America

Dr. Dennis Ojima is Emeritus Professor, Department of Ecosystem Science and Sustainability; Senior Research Scientist, Natural Resource Ecology Laboratory at Colorado State University. He has been elected to the Ecological Society of America President-Elect for 2020 to 2021. His research area involves application of social ecological system approaches to climate and land use changes on ecosystems, carbon

accounting, food security, and adaptation and mitigation strategies to climate change. He coled the effort to establish the US Future Earth hub (2013-2015).



# Dr. Sethuraman "Panch" Panchanathan

Director, National Science Foundation

The Honorable Sethuraman "Panch" Panchanathan is a computer scientist and engineer and the 15th director of the U.S. National Science Foundation (NSF). Panchanathan was nominated to this position by the President of the United States in 2019 and subsequently unanimously confirmed by the U.S. Senate on June 18, 2020. NSF is an \$8.3B independent federal

agency and the only government agency charged with advancing all fields of scientific discovery, technological innovation and STEM education.

Panchanathan is a leader in science, engineering and education with more than three decades of experience. He has a distinguished career in both higher education and government, where he has designed and built knowledge enterprises, which advance research innovation, strategic partnerships, entrepreneurship, global development and economic growth.

Panchanathan previously served as the executive vice president of the Arizona State University (ASU) Knowledge Enterprise, where he was also chief research and innovation officer. He was also the founder and director of the Center for Cognitive Ubiquitous Computing at ASU. Under his leadership, ASU increased research performance fivefold, earning recognition as the fastest growing and most innovative research university in the U.S.

Prior to joining NSF, Panchanathan served on the National Science Board as chair of the Committee on Strategy and as a member of the External Engagement and National Science and Engineering Policy committees. Additionally, he served on the National Advisory Council on Innovation and Entrepreneurship. He was chair of the Council on Research of the Association of Public and Land-grant Universities and co-chair of the Extreme Innovation Taskforce of the Global Federation of Competitiveness Councils. Arizona's Governor appointed Panchanathan as senior advisor for science and technology in 2018. He was the editor-in-chief of the IEEE Multimedia Magazine and editor/associate editor of several international journals.

Panchanathan's scientific contributions have advanced the areas of human-centered multimedia computing, haptic user interfaces, person-centered tools and ubiquitous computing technologies for enhancing the quality of life for individuals with different abilities; machine learning for multimedia applications; medical image processing; and media processor designs. He has published close to 500 articles in refereed journals and conference proceedings, and has mentored more than 150 graduate students, postdocs, research engineers and research scientists, many now occupy leading positions in academia and industry.

For his scientific contributions, Panchanathan has received numerous awards, such as Distinguished Alumnus Awards and the Governor's Innovator of the Year for Academia Award for his development of information technology centric assistive and rehabilitative environments to assist individuals with visual impairments.

Panchanathan is a fellow of the National Academy of Inventors, where he also served as vice president for strategic initiatives. He is also a fellow of the American Association for the Advancement of Science, the Canadian Academy of Engineering, the Institute of Electrical and Electronics Engineers and the Society of Optical Engineering.

Panchanathan is married to Sarada "Soumya" Panchanathan, an academic pediatrician and informatician, who has taught medical students, pediatric residents and informatics fellows. They have two adult children, Amritha and Roshan.



**Cindy Paska** *Council of Scientific Society Presidents* 

As the Executive Director of the Council of Scientific Societies (CSSP), Paska views the broad spectrum of a diverse membership of scientists to work closely with the Board of Directors to successfully ensure the growth of future leaders in science.

With a background across industries, working closely with both

nonprofit and for profit leaders, Paska has a proven record of bridging thinkers from multiple disciplines toward common goals. Through her intuitive perspective and ability to elicit new ways to view existing ideas and approaches, Ms. Paska's non-scientifically conforming thought process has opened pathways about projects that might not have been considered within standard scientific disciplinary development.

Paska holds a Bachelor of Arts degree from Clark University, Worcester, MA.



#### Kalash Patel

Junior, Oviedo High School

Kalash Patel is in 11th grade at Oviedo High School in Oviedo, Florida. Kalash has completed or is in the process of completing 12 Advanced Placement courses and is also a second-year student in the Oviedo Science Research program. He moved from Connecticut 5 years ago when he entered 6th grade.

Being an exceptional student throughout his journey in education, he is also part of many school activities, such as the marching

band and National Honors Society. Joining the Oviedo Science Research at Oviedo as a

sophomore, he placed 2nd in cellular/molecular biology and biochemistry at the regional science fair his first year. He is highly interested in the field of physics and has taken all three AP Physics course offerings at Oviedo. His current research project focuses on the distribution patterns of microplastics in falling droplets and bodies of water, especially in light of recent evidence showing the presence of microplastics in rain.



Haskell Pitluck American Academy of Forensic Sciences

Haskell Pitluck - is a retired Circuit Court Judge of the 19th Judicial Circuit, McHenry County, Illinois. From 1995 to 1996, he was President of the American Academy of Forensic Sciences . He served as Chair of the AAFS Ethics Committee. Presently he serves on the NIST OSAC Odontology Subcommittee. Judge Pitluck is active in the Illinois Judges Association as a Board Member. Judge Pitluck has presented programs and workshops on expert witnesses and ethics at meetings and conferences

both in the US as well as internationally.



#### Jeri Ropero-Miller American Academy of Forensic Sciences

Dr. Jeri Ropero-Miller is a Senior Director for RTI's Center for Forensic Sciences. She is a Board-certified Forensic Toxicologist with Diplomate status on the American Board of Forensic Toxicology (F-ABFT). She is experienced working with a variety of clients, including the National Institute of Justice

(NIJ), Center for Disease Control and Prevention (CDC), and the Drug Enforcement Agency (DEA).

Dr. Ropero-Miller's expertise includes working with large surveys, forensic laboratory operations and capacity enhancements, assessment of criminal justice policy and practice, implementation of forensic databases, analytical technology evaluations, technology transitioning, technology evaluation, and forensic certifications. Her work has been extensively published in the areas of clinical and forensic toxicology, including items for Forensic Science International, Journal of Forensic Sciences, Journal of Analytical Toxicology and a chapter in the 2012 book "Forensic science: Current issues, future directions."

Prior to her tenure with RTI, she served as the Deputy Chief Toxicologist at the State of North Carolina Office of the Chief Medical Examiner and as a Research Chemist at Conoco Incorporated. Dr. Ropero-Miller is the 2020-2021 President of the American Academy of Forensic Sciences (AAFS) and on the AAFS Board of Trustees Forensic Sciences Foundation. She formerly served on the Board of Directors of the ABFT, as the Executive Secretary for the Scientific Area Committee of Chemistry/ Instrumental Analysis, Organization of Scientific Area Committees (OSAC, National Institute of Standards and Technology, NIST), and as a member of the OSAC Toxicology Subcommittee.



#### Laboni Santra Senior, Oviedo High School

Laboni Santra is a senior at Oviedo High School in Oviedo, Florida. She has been conducting research at the University of Central Florida for more than three years. Her project fabricates and optimizes 3D-printed microneedle devices, used in the biomedical industry as a transdermal drug delivery tool, for precision delivery of specially-formulated therapeutics to citrus plant tissue. The technology addresses citrus greening, the world's most severe citrus disease that has devastated the

nearly \$9 billion dollar industry in Florida, by targeting the phloem, a vascular tissue that carries sugars and is home to the disease-causing bacteria.

Laboni is a three-time finalist at the International Science and Engineering Fair (ISEF) and won 4th place in Plant Sciences in her sophomore year. She also won Best-in-Fair at the Florida State Science and Engineering Fair. Laboni is a recipient of the Yale Science and Engineering Association Award and the U.S. Metric Association Science Fair Award. Her research manuscript has been accepted for publication by the peer-reviewed Journal of Young Investigators, and her extended conference abstract has been accepted for a poster presentation at the 34th International Conference on Micro Electro Mechanical Systems (IEEE MEMS 2021).

Laboni's inspiration for her research comes from her natural curiosity to test different techniques, her interactions with local growers whose groves have been devastated from citrus greening, and the support and mentorship of her professor, lab group, and science fair family at school.



**Brian Scalf** Freshman, Oviedo High School

Brian Matthew Scalf is a freshman attending Oviedo High School in Seminole County, FL.

Entering Oviedo High School, Brian brought along with him a certification for the highest GPA in mathematics from Jackson Heights Middle School. In nearly all honors or advanced placement classes, Brian has above a 4.0 weighted GPA and strives to reach the top of his class. With a deeply inquisitive mind of the universe and physics that define it, he has worked to involve himself

in pre-college research to pursue his interest. Many things he wishes to investigate in the future include the initialization of a Dyson sphere, stellar engines, and theoretical thruster models. Currently, he is studying the falling motion of maple leaf seeds from both a physics and ecological approach. He hopes to be able to explain how weight distribution and damage to the samara impact their dispersal, which can hopefully lead to better understanding for flight and species dispersal.

Brian strives to become a renowned mathematician and physicist advancing the scientific community. Within these goals, his determination to meet these standards is unwavering.



Helen Schneider Lemay

Helen Schneider-Lemay heads the CSSP, Waterbird Society and ASLO business offices. She is also Executive Director of NARST. She is the president of The Schneider Group, Inc., an association and meeting management firm specializing in scientific societies.



#### Patricia Simmons

American Association for the Advancement of Science

Patricia Simmons currently serves as the Director of STEM Special Initiatives at the NSTA. Prior to this position, she completed a Science & Technology Policy Fellowship at the American Association for the Advancement of Science (2016-2018), working in the Engineering Directorate at the National Science

Foundation. 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.



Diane Souvaine

Tufts University

Dr. Diane Souvaine served on the National Science Board from 2008-2020 (NSB Chair, 2018-2020; NSB Vice Chair, 2016-2018). Professor of Computer Science and Mathematics, she has held leadership roles at Tufts University: Senior Advisor to the Provost, 2016-2017; Vice Provost for Research, 2012-2016; Chair of the Computer Science Department, 2002-2009. She currently serves on the Board of Trustees and the Executive Committee for the Computer History

Museum: "CHM Decodes Technology For Everyone."



#### Debora Spar

Harvard Business School

Debora Spar is the MBA Class of 1952 Professor of Business Administration at Harvard Business School and Senior Associate Dean of HBS Online. Her current research focuses on issues of gender and technology, and the interplay between technological change and broader social structures. Spar tackles some of these issues in her forthcoming book *Work Mate Marry Love: How Machines Shape Our Human Destiny*.

Spar served as the President of Barnard College from 2008 to 2017, and as President and CEO of Lincoln Center for the Performing Arts from 2017 to 2018. During her tenure at Barnard, Spar led initiatives to highlight women's leadership and advancement, including the creation of the Athena Center for Leadership Studies and the development of Barnard's Global Symposium series. Before joining Barnard, Spar spent 17 years on the HBS faculty as the Spangler Family Professor as well as the Senior Associate Dean for Faculty Research and Development. A prolific writer, Spar's books include *Ruling the Waves: Cycles of Discovery, Chaos, and Wealth from the Compass to the Internet* (2001), *The Baby Business* (2006), and *Wonder Women: Sex, Power, and the Quest for Perfection* (2013).

Spar is a member of the Academy of Arts and Sciences and serves as a director of Value Retail LLC and Thermo Fisher Scientific, as well as a trustee of the Howard Hughes Medical Institute. Spar earned her Ph.D. in Government from Harvard University and her B.S. from Georgetown University's School of Foreign Service.

She and her husband, Miltos Catomeris, are the parents of three grown children.



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 studies how nutrients move through streams and rivers, with a focus on restoration and conservation efforts that improve water quality, especially in agricultural landscapes.

Dr. Tank is committed to science leadership and translation- she is a 2013 Leopold Leadership Fellow, has served as President of the Society for Freshwater Science, and now serves as a Member-at-Large on the CSSP Executive Board.



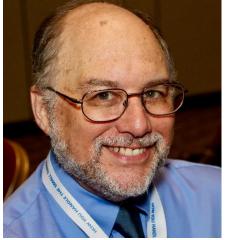
### Grace Thompson

Sophomore, University of South Florida

Grace Thompson is a sophomore at the University of South Florida in the 7-year medical program. Her education is being fully funded through the USF Presidential Award, Lawrence Madeiro Scholarship Fund, USF 7-Year Medical School Program, and the Seminole County Medical Society Scholarships. She is majoring in Cellular and Molecular Biology with a minor in Biomedical Anthropology.

While a student at Oviedo High School, she was named an International Science and Engineering Fair finalist for her research on wax worm gut bacteria and their ability to degrade polyethylene plastic. Her research team worked on developing innovative ways to tackle the robust plastic pollution problem of our planet. She was also awarded the Rotary Youth Leadership Award for her involvement in the Rotary club of Oviedo.

Grace suffers from Ehlers-Danlos syndrome, a genetic connective tissue disorder. Because of her experience with medicine, she wishes to become a geneticist to improve the diagnostic process of rare diseases and conduct research on rare diseases. She is also continuing her research pursuits in college looking at the intersection of machine learning and medicine to improve medical diagnoses.



**Brian Toby** *American Crystallographic Association* 

Brian Toby is a physical chemist, with a Ph.D. from Caltech (1986) and a B.A. from Rutgers (1980). He is a Senior Physicist at Argonne's Advanced Photon Source where he previously led their Materials Characterization and Computational X-ray Science groups as well as served as Chief Computational Scientist. He previously worked at Union Carbide, U. of Penn, Air Products and then NIST. Brian has published ~150 papers with >14,000 citations and a H-

index of 42.For 2020, Brian is the president of the American Crystallographic Association.



#### April Ulrey

Soil Science Society of America

I'll be president of the Soil Science Society of America in 2021 and my vision for the society is to improve diversity and reach out to more graduate students and early career soil scientists. I am a professor of soil and environmental science at New Mexico State University, Las Cruces, where I teach Soils and Soil Chemistry and co-advise our Environmental Science Student Organization. Working with students is my passion.



#### Jeffrey Volenec American Society of Agronomy

Dr. Jeff Volenec is a professor in the Department of Agronomy at Purdue University where his appointment encompasses all three areas of the Land Grant mission: teaching, research, and Extension. Volenec is a whole-plant physiologist/ecologist whose research focuses on the interaction of crops plants with environment and management. Volenec and collaborators study abiotic stress tolerance and input use efficiencies including water, nutrients and radiation that are critical drivers of sustainable production. His teaching responsibilities have included upper-division courses in Crop Physiology and Ecology, and Forage Management.

Volenec recently served as President of the Crop Science Society of America. Previously he served as Editor of Crop Science and as Editor-in-Chief of the Crop Science Society of America. Volenec served as Associate Head of the Agronomy Department at Purdue for 17 years. He is current chair of the Board of Trustees of the Agronomic Science Foundation. He is the recipient of numerous awards including Purdue University's Agricultural Research Award and the Young Crop Scientist Award from the Crop Science Society of America. He has been elected Fellow of the American Association for the Advancement of Science, the American Society of Agronomy, and the Crop Science Society of America. He is a five-time recipient of the Outstanding Teaching Award in the Department of Agronomy at Purdue University. Students also have twice selected him as Outstanding Counselor in the Department of Agronomy.

Dr. Volenec received his M.Sc. and Ph.D. degrees at the University of Missouri-Columbia in 1983 specializing in crop physiology where he studied leaf growth and development in grasses. He earned his B.Sc. in Agronomy/Natural Sciences at the University of Wisconsin-Madison.



# Chris Volpe

Science Counts

Dr. Christopher Volpe is the executive director and a founding board member of ScienceCounts, a 501(c)(3) organization committed to bolstering public awareness of, and support for, scientific research.

Having an academic background in physical chemistry and two decades of private sector experience in marketing and branding of STEM outreach products, Dr. Volpe is developing data-driven social marketing strategies to foster stronger connections between the scientific community and the

general public. He is a leading researcher of public attitudes towards science, and a strong advocate for science communication efforts that bring together a choir of voices from academia, industry, philanthropy, and government. Previously, he served as president and co-founder of Prismatic Laser Programs LLC, the nation's leading provider of STEM-based assembly programs to K-8 schools.



#### Kathleen Weathers

Ecological Society of America

Kathleen Weathers (MFS, Yale; Ph.D. in Ecology Rutgers) is President of the Ecological Society of America, co-Chair Emerita of the Global Lake Ecological Observatory Network (GLEON). She is the G. Evelyn Hutchinson Chair in Ecology at the Cary Institute where she studies air-land-water interactions. Weathers was a rotating Program Officer in NSF's Division of Environmental Biology (DEB) (2009-2010), and an Expert with DEB (2019-2020). Weathers has and does serve on not-for-profit boards locally where she has held many leadership roles.



#### **Paul Weimer** *American Geosciences Institute*

Paul Weimer has been a professor at the University of Colorado at Boulder since 1990. He holds the Bruce D. Benson Endowed Chair in Geological Sciences, and serves as Director of the Energy and Minerals Applied Research Center. His research has focused primarily on the petroleum systems of deep-water continental margins, unconventional resources, and creating animations for public outreach in geology.

Dr. Weimer has published more than 100 papers on a variety of topics: sequence stratigraphy, biostratigraphy, reservoir geology, petroleum systems, 3-D seismic interpretation, structural geology and tectonics. Dr. Weimer has also written two books, and co-edited eleven books, focusing on petroleum systems of deep-water settings, sequence stratigraphy, 3D seismic interpretation, and North Alaska Geology.

Dr. Weimer served as the President of the AAPG in 2011-2012, and gave a 1/2 day short course on the future of petroleum geology at universities in 22 countries. He served as an AAPG Distinguished Lecturer in 1998-1999, the Esso Australia Distinguished Lecturer in 2001, and he gave the SEG/EAGE Distinguished Instructor Short Course in 2004. He received his BA with Honors in Geology from Pomona College in 1978, and his MS degree from the University of Colorado in 1980. He worked as an exploration geoscientist for Sohio Petroleum (later BP) in San Francisco, CA, from 1980-1984. He received his PhD in 1989 from The University of Texas at Austin. He worked with Mobil Oil in Dallas, TX, from 1988-1990 as a research and exploration geoscientist. He is an honorary member of the SEPM-Gulf Coast Section and New Orleans Geological Society, and received the AAPG Distinguished Educator Award in 2005.



#### **Ole Wendroth**

SSSA - Soil Science Society of America

Ole Wendroth is a professor in the department of soil and plant sciences at the University of Kentucky. His areas of interest are soil water and solute transport processes at different spatial and temporal scales.



Jesse Yoder American Crystallographic Association

I am a structural biologist at IMCA-CAT, working with highthroughput modes of X-ray diffraction data collection, processing and model building. The IMCA consortium members are: AbbVie, Bristol-Myers Squibb, Janssen, Merck, Novartis, and Pfizer.



**Richard Yost** ASMS - American Society for Mass Spectrometry

Dr. Yost is the University Professor and Head of Analytical Chemistry at the University of Florida. He also directs the Southeast Center for Integrated Metabolomics (SECIM) and NIH's Metabolomics Consortium Coordinating Center (M3C). He is a leader in the field of analytical chemistry and tandem mass spectrometry (MS/MS). His research has been recognized with the ASMS Award for Distinguished Contribution in Mass Spectrometry and the Florida Academy of Sciences Medal. He

currently serves as Past President of the American Society for Mass Spectrometry (ASMS).



The Council of Scientific Society Presidents (CSSP) acknowledges the American Chemical Society for their continued cooperation.

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