



**2021 WINTER
LEADERSHIP WORKSHOP**
4-7 DECEMBER 2021 · WASHINGTON, DC

PARTICIPANT AND SPEAKER BIOGRAPHIES



DAINA DRAVNIKS APPLE

Society of American Foresters

Daina Dravnieks Apple is a natural resource economist who served in the U.S. Forest Service for 39 years. She was Director of Knowledge Management and Communication in the Research and Development division in Washington DC and was responsible for managing R&D relationships with science organizations and advising on emerging issues likely to affect Forest Service R&D. She served as Designated Federal Official For the Forestry Research Advisory Council that reports to the Secretary of Agriculture and to Congress; and as executive secretary of the OSTP Committee on Environment, Natural

Resources and Sustainability.

Apple led the first Forest Service pilot forest certification program with the Pinchot Institute, that evaluated whether forestry management practices promoted sustainable forest ecosystems; served as regional land use appeals manager in CA; was National Forest System strategic planner; and published papers on water resource policy.

Apple was elected Fellow of the Society of American Foresters; Fellow of Phi Beta Kappa, and served as President of Phi Beta Kappa Northern California Association, and as National Secretary. She is a graduate of the University of California at Berkeley, where she earned a B.Sc. in Political Economy of Natural Resources, and an M.A. in Geography.

Apple is currently a Planning Commissioner for the city of Benicia, CA.



MARTIN 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 (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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KATE BRODERICK

Inovio Pharmaceuticals Inc

Dr. Broderick has a broad background in the product development and device development DNA therapeutic and drug delivery field, with specific expertise in in vivo DNA animal studies and product development in relation to DNA delivery. Her particular area of focus is infectious diseases with an emphasis on emerging targets and those from a bio-threat potential.

On the bio-engineering side, Dr. Broderick leads the device design efforts specifically pertaining to tissue delivery and she has been central to the development of Inovio novel prototypes and designs. Dr. Broderick leads a diverse team of researches which encompasses early discovery work through to IND enabling studies and she is subsequently involved in the clinical and regulatory development of these products.

Most recently, Dr. Broderick is responsible for driving the development of a DNA vaccine for COVID-19. She also led the teams that brought the first in human Lassa fever vaccine into the clinic as well as advanced the development of a DNA vaccine for the MERS virus.

Over the course of her career, Dr. Broderick has authored and co-authored more than 100 peer-reviewed articles, and her team regularly publishes and presents their findings in leading scientific publications and at conferences worldwide. Dr. Broderick has participated by invitation at advisory meetings convened by the World Health Organization to discuss DNA vaccines and their delivery.

She is a co-inventor on multiple patents related to DNA vaccine delivery and has served as a principal investigator on grants, awards, and contracts from leading government agencies and not-for-profit organizations, including the Bill and Melinda Gates Foundation, the National Institutes of Health, the U.S. Department of Defense, the Small Business Innovation Research program, and including a \$56M award from the Coalition for Epidemic Preparedness Innovations (CEPI). In 2018, Dr. Broderick was named Businesswomen of the Year by San Diego Business Journal. 2020 saw Dr Broderick named an In Vivo Rising Leader and in 2021 was recognized as a Women of Influence in Life Sciences by the SDBJ.

Dr. Broderick received her Ph.D. from the University of Glasgow, Scotland, and conducted post-doctoral research at the University of California, San Diego. She joined INOVIO in 2006, where she currently leads a diverse research group focused on enhanced delivery techniques for gene-based therapeutics as the Senior Vice President, R&D.



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.



SYLVIA BROUDER

American Society of Agronomy

Sylvie Brouders (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.



ARTHUR CAPLAN

NYU Grossman School of Medicine

Currently the Drs. William F. and Virginia Connolly Mitty Professor and founding head of the Division of Medical Ethics at NYU Grossman School of Medicine in New York City.

Prior to coming to NYU, Dr. Caplan was the Sidney D. Caplan Professor of Bioethics at the University of Pennsylvania Perelman School of Medicine in Philadelphia, where he created the Center for Bioethics and the Department of Medical Ethics. He has also taught at the University of Minnesota, where he founded the Center for Biomedical Ethics; the University of Pittsburgh; and Columbia University. He received his PhD from Columbia University.

Dr. Caplan is the author or editor of thirty-five books and more than 800 papers in peer reviewed journals. His most recent books are *Vaccination Ethics and Policy* (MIT Press, 2017, with Jason Schwartz) and *Getting to Good: Research Integrity in Biomedicine* (Springer, 2018, with Barbara Redman).

He has served on a number of national and international committees including as chair of the National Cancer Institute Biobanking Ethics Working Group; chair of the Advisory Committee to the United Nations on Human Cloning; and chair of the Advisory Committee to the Department of Health and Human Services on Blood Safety and Availability. He has also served on the Presidential Advisory Committee on Gulf War Illnesses; the Special Advisory Committee to the International Olympic Committee on Genetics and Gene Therapy; the Special Advisory Panel to the National Institutes of Mental Health on Human Experimentation on Vulnerable Subjects; the Wellcome Trust Advisory Panel on Research in Humanitarian Crises; and as the co-director of the Joint Council of Europe/United Nations Study on Trafficking in Organs and Body Parts.

Dr. Caplan has served since 2015 as a chair of the Compassionate Use Advisory Committees (CompAC), independent groups of internationally recognized medical experts, bioethicists, and patient representatives that advise Johnson & Johnson's Janssen Pharmaceuticals on requests for compassionate use of its investigational medicines.

Dr. Caplan is a regular commentator on bioethics and health care issues for WebMD/Medscape, WGBH radio in Boston, WOR radio in New York City, and CNN. He appears frequently as a guest and commentator on various other national and international media outlets.

Dr. Caplan is the recipient of many awards and honors including the McGovern Medal of the American Medical Writers Association and the Franklin Award from the City of Philadelphia. He was a USA Today 2001 "Person of the Year" and was described as one of the ten most influential people in science by Discover magazine in 2008. He has also been honored as one of the fifty most influential people in American health care by Modern Health Care magazine, one of the ten most influential people in America in biotechnology by the National Journal, one of the ten

most influential people in the ethics of biotechnology by the editors of Nature Biotechnology, and one of the 100 most influential people in biotechnology by Scientific American magazine.

During the Covid-19 pandemic, he is co-directing an advisory group on sports and recreation for the US Conference of Mayors, created a working group on coronavirus vaccine challenge studies, developed an ethical framework for distributing drugs and vaccines for J&J, and helped develop rationing policies for NYU Langone Health and many other health systems. He is a member of the WHO advisory committee on Covid-19, ethics, and experimental drugs/vaccines, and he helped set policy for WIRB/WCG for research studies. He was an adviser to Moderna, Inc., and he serves on the NCAA Covid-19 Medical Advisory Group.

Dr. Caplan received the Patricia Price Browne Prize in Biomedical Ethics for 2011. In 2014, he was selected to receive the Public Service Award from the National Science Foundation/National Science Board, which honors individuals and groups that have made substantial contributions to increasing public understanding of science and engineering in the United States. In 2016, the National Organization for Rare Disorders (NORD) honored him with its Rare Impact Award; that year he also received the Food and Drug Law Institute's Distinguished Service Leadership Award and the American Society for Bioethics and Humanities' Lifetime Achievement Award. In 2019, he was honored by the Reagan-Udall Foundation for the FDA with its Innovation Award.

Dr. Caplan holds seven honorary degrees from colleges and medical schools.

DAVID CONROY

Society of Behavioral Medicine



FRANCE CÓRDOVA

Science Philanthropy Alliance

France Anne Córdoba is President of the Science Philanthropy Alliance. She was the first woman to serve as NASA Chief Scientist and as president of Purdue University. She also served as chancellor at UC Riverside and as Director of the NSF. At NSF, she started the Ten Big Ideas program, which included focuses on both breakthrough science and diversity and inclusion, and at UCR she started a new medical school. She was awarded NASA's Distinguished Service Medal, the Kennedy-Lemass Medal from Ireland, the Order of Bernardo O'Higgins from Chile, and was elected a fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Association for Women in Science, and honorary membership in the Royal Irish Academy. She has been inducted into the California Hall of Fame and Stanford University's Multicultural Hall of Fame. She is a 2000 Kilby Laureate for her "contributions to society through science, technology, innovation, invention and education." She has chaired the Board of Regents of the Smithsonian Institution and served as trustee of the Mayo Clinic. She presently chairs the Board of Trustees of the American Institute of Physics (AIP) Foundation. A nunatak in Antarctica, a Sports & Recreation Center at Purdue, and a cocktail in Las Vegas are named for her



JENNIFER COSTLEY

New York Academy of Sciences

Now a Senior Advisor to the Academy, Dr. Costley was formerly Director of Physical Sciences, Sustainability and Engineering, overseeing the Academy's portfolio of sustainability and hard sciences initiatives. She worked closely with the Academy's partner organizations (corporations, foundations, government agencies and individual stakeholders) to develop conferences, symposia, workshops and other sponsor-driven programs.

Prior to joining the Academy, Dr. Costley provided technology leadership to such leading firms as Credit Suisse, DoubleClick, and Bell Labs, and was also a principal of her own consultancy where she conducted research on major technology trends and advised corporations on technology strategy and governance.

Dr. Costley has lead several international working groups to develop environmental standards for computer servers and other electronic devices. She is the author of articles in Computer, Wall Street & Technology, and The New York

Academy of Sciences Magazine. She holds a Ph.D. in Chemical Physics from Columbia University, an Advanced Certificate in Finance from New York University, and a Certificate in Conservation Biology from Columbia University's Center for Environmental Research and Conservation.



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.



HARVEY FINEBERG

Science Philanthropy Alliance

Harvey V. Fineberg, M.D., Ph.D. is president of the Gordon and Betty Moore Foundation. He previously served as president of the U.S. Institute of Medicine (now National Academy of Medicine), as provost of Harvard University, and as dean of the Harvard Chan School of Public Health. Prior to joining a philanthropic foundation, he devoted most of his academic career to the fields of health policy and medical decision-making. His past research has focused on global health, assessment of medical technology, evaluation and use of vaccines, and dissemination of medical innovations.

Dr. Fineberg previously chaired the boards of the Carnegie Endowment for International Peace and the William and Flora Hewlett Foundation. He chairs the board of the Science Philanthropy Alliance, is a member of the China Medical Board, and served on the boards of the Josiah Macy, Jr. Foundation and the Association FXB (USA). He helped found and served as president of the Society for Medical Decision Making. Dr. Fineberg serves on the editorial board of the *New England Journal of Medicine* and in a number of advisory capacities, including the foresight committee of the Veolia Environment Institute and scientific advisory board of the Singapore National Research Foundation. He chairs the advisory board of the Peterson Center on Healthcare, co-chairs the inaugural international advisory board of Tsinghua University Vanke School of Public Health, and chairs the U.S. National Academies standing committee on emerging infectious diseases and 21st century health threats.

Dr. Fineberg is co-author of the books *Clinical Decision Analysis*, *Innovators in Physician Education*, and *The Epidemic That Never Was*, an analysis of the controversial U.S. immunization program against swine flu in 1976. He has co-edited books on such diverse topics as AIDS prevention, vaccine safety, understanding risk in society, and global health and has authored numerous articles published in professional journals.

Dr. Fineberg is the recipient of several honorary degrees, the Frank A. Calderone Prize in Public Health, the Henry G. Friesen International Prize in Health Research, and the Harvard Medal, awarded by the alumni association of the university from which he earned his bachelor's and doctoral degrees.



JILL FROMEWICK

New York Academy of Sciences

Jill Fromewick serves as Senior Researcher with the International Science Reserve (ISR) at the New York Academy of Sciences. Jill is a social epidemiologist by training with 20+ years of experience at the intersection of research, program evaluation, and user experience (UX) design. Guided by a background in qualitative and quantitative methods as well as community participatory research, she collaborates with others to collect, analyze, synthesize, and share data that can be used for decision making and to strengthen program impact. Jill has her Doctorate of Science in Social Epidemiology and Policy from the

Harvard School of Public Health.



ROBERT C. GALLO, MD

Institute of Human Virology at the University of Maryland School of Medicine

After graduating from Thomas Jefferson University School of Medicine in Philadelphia and completing medical training at the University of Chicago, Dr. Robert C. Gallo has developed his career over the next 30 years at the National Cancer Institute (NIH) Bethesda, Maryland. After 30 years, he moved to the University of Maryland School of Medicine, where he became the co-founder of the Institute of Human Virology and its founding Director and The Homer & Martha Gudelsky Distinguished Professor of Medicine and Microbiology and Immunology at the University of Maryland School of Medicine. Shortly after that, in 2011, Gallo became the Co-Founder and International Scientific Advisor to the Global Virus Network (GVN). Dr. Gallo's career-long interest has followed these themes: studying the basic biology of human blood cells, their normal and abnormal growth, and the causes of abnormal growth, whether excessive, e.g., leukemias or insufficient, e.g., immune deficiencies and the involvement of viruses in these abnormalities.

Dr. Gallo and his co-workers opened and pioneered human retrovirology when in 1980, they discovered the first human retrovirus (HTLV-1) and, along with others, especially scientists in Japan, showed it was a cause of a particular form of human leukemia (This was the first, and to date, the only known human leukemia virus and one of the few known viruses shown to cause human cancer). A year later, he and his group discovered the second known human retrovirus (HTLV-2). Dr. Gallo and his colleagues also independently discovered HIV (the 3rd known human retrovirus) and provided the first results to show that HIV was the cause of AIDS. They also developed the lifesaving HIV blood test (1983-1984). In 1986, he and co-workers discovered the first new human herpes in more than twenty-five years, Human Herpes Virus-6 (HHV-6). HHV-6 is now known to be the cause of the infant illness Roseola. Earlier (1978), Gallo discovered a variant of gibbon ape leukemia virus (Hall's Island strain), which causes T-cell leukemia.

The discoveries of all human retroviruses, including HIV, were largely dependent on being able to grow human T-cells (lymphocytes) in the laboratory, which was achieved by using a growth factor called T-cell growth factor (TCGF) and now called Interleukin-2 or IL-2, the first cytokine. Dr. Gallo and his co-workers discovered Interleukin-2 in 1976, thus setting the stage for all groups to culture human T-cells. Today IL-2 is used in laboratory experiments and some therapies for cancer and AIDS. Gallo and co-workers also spent several years in the 1970ies working out detailed biochemical and immunological characteristics of human cellular DNA polymerases alpha, beta, and gamma and reverse transcriptase (RT) from several retroviruses in order to use RT as a sensitive and specific surrogate marker for retroviruses. It was particularly essential to distinguish the mitochondrial DNA polymerase (DNA pol. gamma) from RT because of their similar biochemical characteristics, which led to many prior false claims for detecting human retroviruses.

In 1995 he and his colleagues discovered the first natural (endogenous) inhibitors of HIV, namely some of the beta chemokines. This discovery helped in the later discovery of the HIV co-receptor, CCR5, and opened up entirely new approaches to treating HIV disease. Currently, Dr. Gallo and his team receive significant funding from the Bill and Melinda Gates Foundation and the National Institutes of Health for a promising HIV preventive vaccine candidate.

Dr. Gallo has been awarded 35 honorary doctorates from universities in the United States, China, Sweden, Italy, Israel, Peru, Germany, Belgium, Mexico, Argentina, Spain, Ireland, Jamaica, and Greece.



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 GUIDOTTI

Sigma Xi

Tee L. Guidotti is a physician specializing in occupational and environmental medicine. Past President of Sigma Xi, the Scientific Research Honor Society. His academic career included Chair of the Department of Environmental and Occupational Health at the George Washington University in 2009 and the University of Alberta. Fulbright Visiting Research Chair in Environmental Sciences at the University of Ottawa in 2015.



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.



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.



BRITT KOSKELLA

University of California, Berkeley

Britt Koskella is an Associate Professor in Integrative Biology at the University of California, Berkeley. Her work explores the importance of the bacteria and viruses making up the microbiome in shaping plant health, ecology, and evolution. She received her BA from the University of Virginia in 2001 and her PhD from Indiana University in 2008, and subsequently held postdoctoral and independent research fellowships in both the US (funded by the NSF) and UK (funded by NERC) at Oxford University and the Univer-

sity of Exeter. Her group combines laboratory experimental evolution with studies of natural diversity to understand how bacteriophage viruses shape bacterial evolution, microbiome diversity, and ultimately the health of host organisms. More recently she has been exploring both how and why the microbiome associated with plants shapes pathogen establishment and disease progression, and has demonstrated that plant microbiomes can be selected upon to be better adapted to their hosts. Her work highlights key open questions in the field that must be addressed in order to translate experimental findings into application, for example to improve agricultural sustainability. Koskella is the recipient of the American Society of Microbiology (ASM)'s 2018 Young Investigator Award and the 2020 Fleming Prize from the Microbiology Society.

CARRIE LABOSKI

Soil Science Society of America



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.



JONI MIHURA

Society for Personality Assessment

Joni is a professor of Psychology at the University of Toledo. She is currently the President for my society, the Society for Personality Assessment (Sept 2021 - Sept 2023). She is a psychological test developer with expertise in psychosis and conducting systematic reviews and meta-analyses of the empirical literature.

PATRICIA MORRIS

Federation of American Societies for Experimental Biology



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.

SETH MURRAY

Crop Science Society of America (CSSA)



DEV NIYOGI

Jackson School of Geosciences

Dev Niyogi is the John E. “Brick” Elliot Centennial Endowed Professor, Department of Geological Sciences, Jackson School of Geosciences, and Department of Civil, Architectural and Environmental Engineering, Cockrell School of Engineering, The University of Texas at Austin.

He also serves as Professor Emeritus, Purdue University with Joint appointments in Department of Agronomy- and Department of Earth, Atmospheric, and Planetary Sciences, and is also with Division of Ecological and Environmental Engineering (Courtesy). He has been the former Indiana State Climatologist (2005- 2018).

Dev Niyogi’s research seeks to significantly contribute to our understanding of the Earth system, particularly the urban and agricultural landscapes, and the dynamic role of coupled land surface processes on weather and regional meteorological extremes. An important ongoing and emerging focus of his research is to translate the scientific work undertaken into decision tools and portals with a particular focus on hydroclimatology and sustainable climate-ready/resilient cities.

Dr. Niyogi was the most recent chair of the American Meteorological Society (AMS) Board of Urban Environment and elected advisory board member of the International Association of Urban Climate. He is currently part of AMS Committee on Applied Climatology, and recently formed AMS-wide International Mentoring/Visitors Committee. He has been a member of the AMS Committees on Agriculture and Forest Meteorology, invited member FGDC Spatial Climate Working Group, Member of the Weather Research and Forecast (WRF) model WG-14 (land surface models), and Member of the AGU Biogeochemistry meetings group / spring meeting student awards chair. He also has a robust international network of research projects with currently active collaborators, joint students, or funded projects in India, China, Germany, Ireland, Zimbabwe, Luxembourg, and France.

Dr. Niyogi has coauthored over 210 papers for international journals, 18 book chapters, and over 150 conference proceedings or abstracts for professional conferences such as the AMS and AGU meetings. According to Google Scholar, his research has been cited over 13800 times (h-index > 55; i-index >185), and his work has been read over 55,100 times per Research Gate statistics. His work has been highlighted in various media outlets including in the popular press such as Yahoo!, MSNBC, Wired, CNN, LiveScience, National Geographic, Tedx Talk, NASA press releases.



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.



GREGORY PETSKO

Harvard Medical School and Brigham & Women's Hospital

From 2012-2018 he was Arthur J. Mahon Professor of Neurology and Neuroscience at Weill Cornell Medical College in New York City, where he was also Director of the Helen and Robert Appel Alzheimer's Disease Research Institute.

He received his BA from Princeton University, summa cum laude, in 1970, and his D. Phil. from Oxford University (which he attended as a Rhodes Scholar) in Molecular Biophysics in 1973.

He was Professor of Chemistry at MIT from 1978 until 1990, when he moved to Brandeis University as Gyula and Katica Tauber Professor of Biochemistry and Chemistry, Director of the Rosenstiel Basic Medical Sciences Research Center, and Chair of the Department of Biochemistry.

He moved to Weill Cornell Medical College in April 2012 and to Harvard Medical School and Brigham & Women's Hospital in Boston in 2019. He is married to Dr. Laurie Glimcher, the President and CEO of the Dana-Farber Cancer Institute.

His awards include the Siddhu Award and the Martin J. Buerger Award, both from the American Crystallographic Association (35 years apart), the Pfizer Award in Enzyme Chemistry of the American Chemical Society (for development of methods to visualize reaction intermediates in three dimensions at atomic resolution), the Lynen Medal for pioneering contributions to the study of protein dynamics, the McKnight Endowment for Neuroscience Brain Disorders Award, a Guggenheim Fellowship, and in 1991 the Max Planck Prize, shared with Professor Roger Goody of Heidelberg for their joint work on the molecular origins of Ras-dependent human cancers. He is an elected Fellow of the American Association for the Advancement of Science and the American Neurological Association.

He has been elected to the National Academy of Sciences, the National Academy of Medicine, the American Academy of Arts and Sciences, and the American Philosophical Society. He has an honorary Doctor of Laws from Dalhousie University.

He is Past-President both of the American Society for Biochemistry and Molecular Biology and of the International Union of Biochemistry and Molecular Biology and past Chair of the Medical Sciences Section of the AAAS.

His research interests currently focus on the development of new treatments for age-related neurodegenerative diseases, including ALS (Lou Gehrig's), Alzheimer's and Parkinson's diseases; much of this is done in collaboration with his friend Dr. Scott Small of Columbia University, who discovered the central role of endosomal protein trafficking in many neurological disorders, and with long-time collaborator Prof. Dagmar Ringe of Brandeis University.

His greatest accomplishments are the more than 200 young scientists he has helped to train, a list that includes five Howard Hughes Investigators, two members of the National Academy of Sciences, four high-school science teachers, seven teachers at small liberal arts colleges, and the second woman ever to head a Max-Planck Institute.

His public lectures on the aging of the population and its implications for human health have attracted a wide audience in person and on the Internet (one of his TED talks, for example, has been viewed more than a million times).

For many years he has also written a widely-read and much reprinted column on science and society, the first ten years of which are available in book form. He admits, however, that the columns guest-written by his two dogs, Mink and Clifford, are much more popular than those he writes himself.



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.



TEDDIE POTTER

Minnesota School of Nursing

Dr. Potter is deeply committed to climate change education including co-founding Health Professionals for a Healthy Climate, membership in the Alliance of Nurses for Healthy Environments, and membership on the American Academy of Nursing Environment and Public Health Expert Panel. She is a member of the Coordinating Committee of Columbia University's Global Consortium on Climate and Health Education and a Fellow in the Institute on the Environment at the University of Minnesota. She chairs Clinicians for Planetary Health (C4PH) and is a member of the Steering Committee of

the Planetary Health Alliance at Harvard.

At the University of Minnesota, Dr. Potter designed and co-teaches an interdisciplinary course titled "The Global Climate Challenge: Creating an Empowered Movement for Change". In addition, she co-leads a Health Sciences initiative titled, "Climate Change and Health: An Interprofessional Response." In 2019, Dr. Potter was appointed the first Director of Planetary Health for the School of Nursing.



GERALDINE RICHMOND

US Department of Energy

Geraldine (Geri) Richmond is the currently serving as the undersecretary for science and energy at the Department of Energy (DOE). In this role she oversees DOE's Office of Science, the nation's largest federal sponsor of basic research in the physical sciences, DOE's applied R&D areas of nuclear, fossil, and renewable energy, and energy system integrity, and the DOE national laboratories and their facilities. Prior to this DOE appointment she served as Presidential Chair in Science and Professor of Chemistry at the University of Oregon since 1985. With a passion for science, Richmond has been active

teaching science and in conducting fundamental research on important environmental topics using laser-based techniques and theoretical methods. Richmond is a member of the U.S. National Academy of Sciences and the American Academy of Arts and Sciences. In recent years she has served two terms as a presidential appointee to the National Science Board and as the U.S. State Department Science Envoy for the Lower Mekong River Countries. In addition to serving on numerous national and international advisory boards, Richmond has been President of the American Association for the Advancement of Science (AAAS) and Sigma Xi, the Scientific Research Honor Society A career-long advocate for underrepresented groups in STEM fields, she is the founding director of a grass-roots organization called COACH that has helped over 25,000 women scientists and engineers in career advancement in the U.S. and in dozens of developing countries around the world. Recent awards for her research, education and outreach activities include the National Medal of Science (2016), the Priestley Medal from the American Chemical Society (2018) and the Linus Pauling Medal Award (2018).

A native of Kansas, Richmond received her B.S. in chemistry from Kansas State University and her Ph.D. in physical chemistry at the University of California, Berkeley.

MARGARET SCHNEIDER

Society of Behavioral Medicine



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). Simons was awarded over \$50 million in externally funded federal and private grants for research, teacher education, and education projects.



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.



SHIRLEY TILGHMAN

Science Philanthropy Alliance

Shirley M. Tilghman was elected Princeton University's 19th president on May 5, 2001 after serving on the Princeton faculty for 15 years. Upon the completion of her term in June of 2013, she returned to the faculty. During her scientific career as a mammalian developmental geneticist, she studied the way in which genes are organized in the genome and regulated during early development, and was one of the founding members of the National Advisory Council of the Human Genome Project for the National Institutes of Health.

Dr. Tilghman is an Officer of the Order of Canada, the recipient of a Lifetime Achievement Award from the Society for Developmental Biology, the Genetics Society of America Medal, and the L'Oreal-UNESCO Award for Women in Science. She is a member of the American Philosophical Society, the National Academy of Sciences, the National Academy of Medicine and The Royal Society of London. She serves as a trustee of Amherst College, the Institute for Advanced Study, and the Simons Foundation. She serves on the Science Advisory Board of the Chan Zuckerberg Initiative, is a director of The Broad Institute, a Fellow of the Corporation of Harvard College, and is a senior science advisor for the Science Philanthropy Alliance.

MASHA TRENHAILE

Bayer Crop Science



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.



JENNIFER VANOS

Arizona State University

Dr. Jennifer Vanos holds an interdisciplinary appointment studying climate & human health in the School of Sustainability at Arizona State University. As a human biometeorologist, she works to strengthen the understanding and practice surrounding how we protect people from extreme heat and air pollution in a world impacted by climate change. She is Chair of the American Meteorological Society's Board on Environment & Health. She previously worked at UC San Diego, Texas Tech, and Health Canada.

P.V. VARA PRASAD

Crop Science Society of America (CSSA)



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.

ROLF WEBERG

University of Minnesota Duluth



BENJAMIN ZAITCHIK

Johns Hopkins University

Benjamin Zaitchik is an Earth scientist who studies hydroclimatic variability across a range of spatial and temporal scales. This includes work on fundamental atmospheric and hydrological processes as well as application to problems of water resources, agriculture, and human health. Prior to joining Johns Hopkins University, Dr. Zaitchik was a Research Associate at NASA and a Fellow at the U.S. Department of State. He holds a PhD in Geology & Geophysics from Yale University, an MS in Soil Sciences from Cornell University, and an AB in Biology from Harvard College. He is currently the

President-Elect of the GeoHealth Section of the American Geophysical Union and Co-Chair of the World Meteorological Organization Task Team on COVID-19.

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