

Roundtable on Public Interfaces of the Life Sciences

Committee

Cynthia M. Beall

Co-Chair

Cynthia Beall is Distinguished University Professor and S. Idell Pyle Professor of Anthropology at Case Western Reserve University where she began teaching and research in 1976. Dr. Beall is a physical anthropologist whose research focuses on human adaptation to high-altitude hypoxia, particularly the different patterns of adaptation exhibited by Andean, Tibetan and East African highlanders. Her current research deals with the genetics of adaptive traits and evidence for natural selection, with the role of nitric oxide in oxygen delivery at high altitude and with the human ecology of high-altitude Tibetan nomads. Dr. Beall is a member of the U.S. National Academy of Sciences, American Philosophical Society, and the American Academy of Arts and Sciences. Dr. Beall currently serves on the Division Committee for the Behavioral and Social Sciences and Education, and chaired the Board on International Scientific Organizations and the Committee on Thinking Evolutionarily: Making Biology Education Make Sense. She received a Ph.D. in 1976 and an M.A. in 1972 from The Pennsylvania State University.

May R. Berenbaum

Co-Chair

Dietram A. Scheufele

Co-Chair

Dietram Scheufele is the John E. Ross Professor in Science Communication in the Department of Life Sciences Communication at the University of Wisconsin, Madison, and Co-PI of the Center for Nanotechnology in Society at Arizona State University. His research focuses on shaping public attitudes toward science and technology, with a recent emphasis on the role that social media and other emerging modes of communication play in society. Dr. Scheufele has published extensively in the areas of public opinion, political communication, and public attitudes towards emerging technologies, including nanotechnology, synthetic biology, stem cell research, nuclear energy, and genetically modified organisms. He is listed by Microsoft Academic Search as one of the ten most cited researchers in the communication discipline. Dr. Scheufele has served on many committees and advisory panels, including the National Conference of Lawyers and Scientists, the Nanotechnology Technical Advisory Group to the U.S. President's Council of Advisors on Science and Technology, and the National Academy of Engineering Committee on Developing Effective Messages for Improving Public Understanding of Engineering. He has received multiple research and teaching awards and is an elected member of American Association for the Advancement of Science and the Wisconsin Academy of Sciences, Arts & Letters. Dr. Scheufele received both his MA Journalism and Mass Communications and his PhD in Mass Communications from the University of Wisconsin-Madison.

Ivan Amato

Member

Kristi S. Anseth

Member

Joseph Arvai

Member

Joseph Arvai is a professor and the Svare Chair in Applied Decision Research in the Department of Geography, and the Institute for Sustainable Energy, Environment, and Economy at the University of Calgary. He is also a Senior Researcher at Decision Research in Eugene, Oregon, and an Adjunct Professor in Engineering and Public Policy at Carnegie Mellon University in Pittsburgh, Pennsylvania. He received his Ph.D. in the risk and decision sciences from the University of British Columbia and also holds degrees in ecology (BSc) and oceanography (MSc). Dr. Arvai's research focuses on advancing the understanding of how people process information and make decisions, both as individuals and in groups. A second objective of his research is to develop and test decision support tools that can be used to improve decision quality across a wide range of environmental, social, and economic contexts. Dr. Arvai serves on the NAS Board on Environmental Change and Society, and previously served on the Committee on Human Dimensions of Global Change and the Panel on Strategies and Methods for Climate-Related Decision Support.

Rick E. Borchelt

Member

Rick Borchelt is the Director of Communications and Public Affairs for the Department of Energy. Previously he was Special Assistant for Public Affairs to Director Harold Varmus at the National Cancer Institute at NIH and was Director of the Office of Public Affairs and Research Communication. He is the former Director of Communications for the U.S. Department of Agriculture's Office of Research, Education, and Economics, and was Communications Director for the Pew Charitable Trusts-funded Genetics and Public Policy Center. He has had a varied career in science communications, including stints as media relations director for the National Academy of Sciences, press secretary for the U.S. House of Representatives Committee on Science, Space and Technology, and special assistant for public affairs in the Executive Office of the President. He previously served the Office of Science as outreach strategist. Mr. Borchelt has been active in science writing throughout his career. He was an elected member of the boards of both the Council for the Advancement of Science Writing and the National Association of Science Writers, and president of the DC Science Writers Association. An undergraduate biology major, he's done graduate work in both insect systematics and science communication. Areas of particular interest include developing community based public engagement in science and adapting the Southern narrative tradition to science communication.

Rodolfo Dirzo

Member

David E. Duncan

Member

Mr. Duncan is an award-winning, best-selling author of eight books; a journalist; and a television, radio and film producer and correspondent. His most recent book is *When I'm 164: The New Science of Radical Life Extension*, and *What Happens If It Succeeds*. He also wrote *Experimental Man: What One Man's Body Reveals about His Future, Your Health, and Our Toxic World*. David is a correspondent for *The Atlantic* and the chief correspondent for NPR Talk's *Biotech Nation*, he also writes for *The New York Times*, *Fortune*, *Wired*, *National Geographic*, *Discover* and many other publications. He is the founding director of the Center of Life Science Policy at UC Berkeley, and has been a commentator on NPR's *Morning Edition* and a contributing editor for *Wired*, *Discover* and *Conde Nast Portfolio*. David is a former special correspondent and producer for ABC's *Nightline* and a correspondent for NOVA's *ScienceNOW!* The recipient of numerous awards, including *Magazine Story of the Year* from the American Association for the Advancement of Science, David's work has appeared twice in *The Best American Science and Nature Writing*. Duncan is a member of the San Francisco Writers' Grotto, a workspace co-operative that also includes Po Bronson, Caroline Paul and Tom Barbash, among others. Duncan is the founding director of the Center for Life Science Policy at the University of California at Berkeley. He is the founder and former director of The BioAgenda Institute for Life Science Policy, a San Francisco-based nonprofit think-tank that held summits, panels and discussions, and sponsored white papers on important issues in the life sciences between 2003 and 2007. In 2011, he launched The Personalized Health Project, sponsored by The Ewing Marion Kauffman Foundation. He regularly lectures at Singularity University.

John Durant

Member

David Fowler

Member

David Goldston

Member

David Goldston is Director of Government Affairs for Natural Resources Defense Council in Washington, D.C. and is responsible for its governmental strategies, bringing together NRDC's interactions with Congress, the administration and the public. He has more than twenty years of experience on Capitol Hill, working mainly on science and environmental policy and served as chief of staff of the House Committee on Science from 2001 through 2006. He has been a visiting lecturer at Princeton and Harvard Universities and a columnist for the journal Nature. In 2008 and 2009, he was project director for the Bipartisan Policy Center report, "Improving the Use of Science in Regulatory Policy" and he has served on several panels at the National Academy of Sciences. David graduated from Cornell University in 1978 with a B.A. in history and completed the course work for a Ph.D. in American history at the University of Pennsylvania.

Fred L. Gould

Member

Fred Gould is a University Distinguished Professor at North Carolina State University. The research mission of his lab group is to investigate the ecology and genetics of insect pests in order to better understand natural and human-induced evolution. The belief is that this knowledge will contribute to improving food production, and the health of humans and the environment. The lab uses diverse approaches to achieving our goals, ranging from molecular analysis and ecological experiments to mathematical and computer modeling. The lab has historically focused on pests of agricultural importance, as seen in research projects with the headings "plant-insect interactions", "evolution of moth sexual communication systems", and "evolution of resistance in crop pests". In the past 5 years we have expanded our research to also include pests such as mosquitoes that have direct impacts on human health. Dr. Gould received his PhD in Ecology and Evolutionary from SUNY Stony Brook.

James E. Hildreth

Member

David W. Inouye

Member

David Inouye is Professor Emeritus in the Department of Biology at the University of Maryland, College Park, where he has taught courses in conservation biology, ecology, and the interplay between science and the media. He does research each summer at the Rocky Mountain Biological Laboratory (in Colorado) where the National Science Foundation funds his long-term work on the phenology, pollination, and demography of wildflowers. The data he has collected there since 1973 are providing insight into the effects of global and regional climate change, particularly on the phenology and abundance of flowering. David is on the Steering Committee of the North American Pollinator Protection Campaign, on the Board of Directors of the National Phenology Network, the Scientific Advisory Board of the Endangered Species Coalition, and is a Lead Author for the report on pollination by the Intergovernmental Platform on Biodiversity and Ecosystem Services. As of August 2014 he will serve as President of the Ecological Society of America.

Molly M. Jahn

Member

Molly Jahn is a Professor in the Laboratory of Genetics and Department of Agronomy at the University of Wisconsin-Madison, and Special Advisor to the Chancellor and Provost for Sustainability Sciences. She has had a distinguished research career in plant genetics, genomics and plant breeding of vegetable crops focusing on molecular genetics of disease resistance and quality traits. Her research groups at UW Madison and Cornell University have produced crop varieties now grown commercially and for subsistence on six continents under approximately 60 active commercial licenses. She has also worked extensively in developing countries to link crop breeding with improved human nutrition and welfare. Her innovative approaches to inter-sector partnerships, engagement with emerging institutions, and integrated projects focused on impact and technology transfer have been highlighted in numerous studies and books. She has consulted widely in the private sector, and has served as an advisor for philanthropic interests, venture capital and finance, First Nations, and U.S and foreign governmental agencies in agriculture, food security, life and environmental sciences. She received the BA with distinction in biology from Swarthmore College and holds graduate degrees from MIT and Cornell University.

Kirk R. Johnson

Member

Alan I. Leshner

Member

Bruce V. Lewenstein

Member

Michael M. Lohuis

Member

Michael Lohuis is the Director for Global Scientific Engagement within the Corporate Engagement team at Monsanto. In this role, he is leading efforts to enhance connectivity with the scientific community particularly regarding societal concerns about agriculture. He is also coordinating a strategy to address the challenges associated with agriculture and the environment. Previously, he led the IP and Collaborations team in Global Breeding Technology. Dr. Lohuis began his Monsanto career in 1998 as Lead for Monsanto's Animal Genomics and Breeding program. He has led teams of scientists in the fields of modeling, patent science, statistics, genomics, QTL detection, marker-assisted selection and breeding. Prior to joining Monsanto, Dr. Lohuis was an assistant professor in the Animal Breeding Department, University of Guelph, Ontario, Canada. He obtained his Ph.D. in animal breeding and B.Sc. in animal science at the University of Guelph.

Tiffany Lohwater

Member

Tiffany Lohwater is Director of Meetings and Public Engagement at AAAS. A science communications and event professional, she is responsible for the AAAS Annual Meeting and the AAAS Center for Public Engagement with Science and Technology. The AAAS Annual Meeting is the predominant international scientific conference for scientists, engineers, policymakers, journalists, and others interested in the intersection of science, technology, and society. The AAAS Center for Public Engagement provides a vehicle for boosting public awareness and understanding of the nature of science and the work of scientists, while at the same time increasing public input into scientific research and policy agendas. Lohwater's work encourages scientists to take a more personal and proactive interest in public engagement. She previously worked in research communications and public events at Johns Hopkins University and Rensselaer Polytechnic Institute.

George I. Matsumoto

Member

Jonathan D. Moreno

Member

Matthew Nisbet

Member

John Ohab

Member

John Ohab is a digital strategist at the U.S. Naval Research Laboratory, director of community engagement at SciStarter. As a member of the Technology Transfer Office, Dr. Ohab is the day-to-day liaison between NRL and its external, online communities. He provides policy and strategic communications guidance to NRL's senior leadership and is responsible for integrating emerging technologies into public outreach activities. Before joining NRL, Dr. Ohab was a new technology analyst at the Department of Defense (DOD), where he provided research and evaluation of web technology initiatives for the DOD Public Web Program. He also led DOD's award-winning outreach project, "Armed with Science," a cross-agency effort to connect military scientists and engineers with the public using social media and podcasting. Dr. Ohab is committed to pursuing creative endeavors that connect the scientific community and the general public. He moonlights as the Director of Community Engagement at SciStarter, a startup company that enables everyday people to participate in real scientific research projects. He also manages and contributes to a new Public Library of Science (PLOS) blog, titled "CitizenSci," which explores the growing landscape of public participation in science. Recently, Dr. Ohab wrote and acted in a series of teacher development videos for Sangari Active Science, an investigation-centered elementary and middle school science curriculum. Dr. Ohab has received several awards for excellence in communications and public outreach. Most recently, he was honored at the White House "Champions of Change" ceremony for his work on the Presidential Initiative, Data.gov. In 2010 and 2011, Dr. Ohab was recognized by the National Association of Government Communicators for his work in social media and podcasting. He is regularly invited to speak at national conferences, including the Advanced Learning Institute's Social Media for Government Conference, the O'Reilly Gov 2.0 Expo, and the Government Workforce: Learning Innovations conference. Dr. Ohab received his BS in biopsychology from UC Santa Barbara and his PhD in neuroscience from the University of California at Los Angeles.

Ivan Oransky

Member

Ivan Oransky is the Vice President and Global Editorial Director of MedPage Today. He teaches medical journalism at New York University's Science, Health, and Environmental Reporting Program, and he is the Vice President of the Association of Health Care Journalists. He also manages the blogs Retraction Watch and Embargo Watch. Dr. Oransky was once Executive Editor of Reuters Health; Managing Editor, Online, of Scientific American; Deputy Editor of The Scientist; and Editor-In-Chief of the now-defunct Praxis Post. For three years, he taught in the health and medicine track at the City University of New York's Graduate School of Journalism. Dr. Oransky earned his bachelor's at Harvard, where he was the Executive Editor of The Harvard Crimson, and his MD at the New York University School of Medicine, where he held an appointment as Clinical Assistant Professor of Medicine.

Stephen Palacios

Member

Stephen Palacios is an executive vice president with the innovation consulting firm, Added Value Cheskin. He leads the company's Hispanic practice, directing strategy on client engagements relating to new market assessment, product innovation, and communication strategy. Clients include Pepsi, Wells Fargo, Time Warner Inc., AstraZeneca. He is a leading expert in the U.S. Hispanic market having helped guide strategy for organizations such as Blue Cross Blue Shield (various regions) Meredith Corporation and the National Council of La Raza. Palacios holds a B.A. from Saint Joseph's University (PA), where he was Valedictorian and an M.A. from American University, where he was awarded a Fellowship. He is a frequent speaker at industry conferences and has been featured in publications including the Los Angeles Times, Harvard Business Review and AdAge, and has been featured on ABC's Nightline and PBS's Latino market documentary, Brown is the New Green.

William D. Provine

Member

William Provine is the Director of Science & Technology External Affairs at DuPont. In this role, Dr. Provine is responsible for defining strategic direction for DuPont's Science and Technology programs with external collaborators and stakeholders including federal governments, other companies, universities, and the public sector at large. External to DuPont, Dr. Provine currently serves on advisory boards for a number of science centers at Oak Ridge National Lab, UC Berkeley/Lawrence Berkeley Lab, University of Delaware, University of Wisconsin, and Michigan State University. Dr. Provine is also a founding member of the World Council on Industrial Biotechnology and the International Council on Nanotechnology. Dr. Provine was nominated, appointed and currently serves on the Department of Commerce/Bureau of Industry and Security's Emerging Technology and Research Technical Advisory Committee, the US DOE/USDA Biomass R&D Technical Advisory Committee, and a temporary scientific working group of the Organization for the Prohibition of Chemical Weapons on the convergence of biology and chemistry. He joined DuPont in 1992 and has served in a variety of research, marketing, business development, and operations leadership roles including oversight for commercialization efforts. Dr. Provine also has managed key strategic collaborations around the world for DuPont with companies, universities, government agencies, and non-profit organizations. Dr. Provine received a PhD in Chemical Engineering from the University of Delaware.

Vincent Racaniello

Member

Vincent Racaniello is a Higgins Professor in the Department of Microbiology and Immunology at Columbia University's College of Physicians and Surgeons. He is one of four virologists who has recently authored Principles of Animal Virology, a respected textbook used by many teaching virology to undergraduate, medical and post-graduate students. As an esteemed member of the scientific community, Racaniello has received several awards including Irma T. Hirsch, Searle Scholars, Eli Lilly and NIH Merit. He has also been a Harvey Society Lecturer at Rockefeller University, the Hilleman Lecturer at the University of Chicago, and University Lecturer at Columbia University. Racaniello has served on the editorial boards of scientific journals, including the Journal of Virology, and is a community editor for the open access journal PLOS Pathogens. Racaniello graduated from Cornell University in 1974 (BA, biological sciences) and completed his PhD in the laboratory of Peter Palese in 1980, studying genetic reassortment of influenza virus. As a post-doctoral fellow in David Baltimore's laboratory at MIT (1979–1982), Racaniello used recombinant DNA technology to clone and sequence the genome of the small RNA animal virus poliovirus. Using these tools he generated the first infectious clone of an animal RNA virus

Kenneth S. Ramos

Member

Kenneth Ramos is Associate Vice President for Precision Health Sciences at the Arizona Health Sciences Center at the University of Arizona. In this new role, Dr. Ramos is responsible for developing precision-health strategies and approaches to health outcomes and health-care delivery. He also will lead development of personal diagnostics and therapeutics for complex diseases, including cancer, cardiopulmonary disorders and diabetes. Previously Dr. Ramos was a professor in the Department of Biochemistry and Molecular Biology and Director of the Center for Genetics and Molecular Medicine in the School of Medicine at the University of Louisville. Dr. Ramos also holds appointments at the School of Public Health and Information Sciences in the Department of Environmental and Occupational Health Sciences, the James Graham Brown Cancer Center, and the Green Center for Engineering. Dr. Ramos is a leading expert in the study of the molecular mechanisms of environmental injury and genetic and epigenetic determinants of environmental disease and has long standing interests in transcriptional control, genomic basis of environmental vascular and renal disease and inference of biological regulatory networks. A major focus of his research is the study of mammalian retroelements and endogenous retroviral-like sequences. Dr. Ramos is the former president of the Society of Toxicology (2008-2009), and continues to engage in Society activities including He has also served on numerous National Research Council committees including the Committee on Application of Toxicogenomics Technologies to Predictive Toxicology, Committee on Emerging Issues and Data on Environmental Contaminants, and Committee on Application of Genomic Signatures: A Workshop. Dr. Ramos completed his undergraduate degree in pharmacy at the University of Puerto Rico and received a PhD in biochemical pharmacology and toxicology from the University of Texas at Austin.

Margaret A. Riley

Member

Tami C. Schilling

Member

Judy Scotchmoor

Member

Beth A. Shapiro

Member

Beth Shapiro is an evolutionary molecular biologist in the Department of Ecology & Evolutionary Biology at the University of California, Santa Cruz. Her research focuses on how populations and species change through time, particularly in response to environmental change. Dr. Shapiro's research group integrates experimental and computational approaches to analyze genetic information (ancient DNA and RNA viruses) isolated from fossil and archived remains of plants and animals to identify periods of population growth, decline, or turn over with historical analyses of climate, environmental, and epidemiological records to identify the causative factors behind changes in genetic diversity. Prior to her position at UC Santa Cruz, Dr. Shapiro was the Shaffer Assistant Professor of Biology at Pennsylvania State University and director of the Henry Wellcome Ancient Biomolecules Centre at Oxford University. Dr. Shapiro has received multiple awards and honors including becoming a Packard Fellow, PopTech Science and Public Leadership Fellow, and National Geographic Emerging Explorer Fellow in 2010. In 2009 she was a MacArthur Fellow and recognized as a Searle Scholar. Dr. Shapiro received her MA in ecology from the University of Georgia and her PhD in zoology from Oxford University.

Brooke Smith

Member

Brooke Smith is the Executive Director of COMPASS (Communication Partnership for Science and the Sea), a science-based organization focused on improving communication of marine and environmental sciences. Ms. Smith's expertise is in ocean sciences and ocean policy, connecting science to policy and the public, state and federal environmental policy, and program and organizational management. As Executive Director, Ms. Smith leads the vision, strategy, and administration of COMPASS's three overarching programs in communications, science, and policy. Prior to joining COMPASS in 2001, Brooke worked for the federal government, consulting firms, and non-profits all focused on environmental issues including oceans, federal lands, and Native American environmental justice issues. Ms. Smith serves as vice chair of Board of Directors for the Surfrider Foundation and was recently a Donella Meadows Leadership Fellow. She also holds a courtesy faculty appointment at Oregon State University. Ms. Smith received her MS from Oregon State University's College of Oceanic and Atmospheric Sciences.

Nicholas Spitzer

Member

Nicholas C. Spitzer is Distinguished Professor of Neurobiology and Director of the Kavli Institute for Brain and Mind (KIBM) at the University of California, San Diego. He is a developmental neurobiologist known for studies of calcium-dependent embryonic neuronal excitability and activity-dependent neuronal differentiation. He identified frequency codes by which calcium signals instruct neural development and demonstrated that physiological calcium activity can respecify the neurotransmitters neurons express. His findings identify a form of neuronal plasticity shaping behavior. Spitzer was born in New York City and grew up in Princeton, New Jersey. He received his B.A. in biology from Harvard College in 1964, attended Harvard Medical School for several years and received his Ph.D in neurobiology in 1969 from Harvard University. After postdoctoral work at Harvard and University College London he joined the faculty at UC San Diego in 1972. He has been chair of the Biology Department, the Neurobiology Section and chair of the Academic Senate, and has served as a member of the NIH NINDS Council and as a Trustee of the Grass Foundation. He is editor-in-chief of BrainFacts.org, a fellow of the American Association for the Advancement of Science and member of the American Academy of Arts and Sciences and the National Academy of Sciences.

Mary M. Woolley

Member

Mary Woolley is the President of Research!America, the nation's largest not-for-profit alliance working to make research to improve health a higher national priority. Woolley is an elected member of the Institute of Medicine and serves on its Governing Council. She is a Fellow of the American Association for the Advancement of Science and serves on the National Academy of Sciences Board on Life Sciences. She is a Founding Member of the Board of Associates of the Whitehead Institute for Biomedical Research and is a member of the visiting committee of the University of Chicago Medical Center. Woolley is also a member of the National Council for Johns Hopkins Nursing. Woolley has also served as president of the Association of Independent Research Institutes, as editor of the Journal of the Society of Research Administrators, as a reviewer for the National Institutes of Health and National Science Foundation, and as a consultant to several research organizations. She has a 30-year publication history on science advocacy and research related topics, and is a sought-after speaker, often interviewed by science, news, and policy journalists. She holds an honorary doctoral degree from the Northeast Ohio Medical University (NEOMED).

Keegan Sawyer

Staff Officer

Dr. Keegan Sawyer is a Senior Program Officer of the Board on Life Sciences at the US National Academies of Sciences, Engineering, and Medicine. Her work addresses a wide range of research, policy, and communication questions across the broad spectrum of life science disciplines. She has special interest in the interplay of environmental conditions and human health, ecosystem health, and public engagement in science. Dr. Sawyer is Director of the National Academies' Standing Committee on Emerging Science for Environmental Health Decisions. She also served as the Project Director for the Roundtable on Public Interfaces of the Life Sciences and the Committee on Gene Drives Research in Non-Human Organisms: Recommendations for Responsible Conduct. She is committed to fostering discussions about research infrastructure, collaborative environments, and public engagement in science to support a healthier people and planet. Dr. Sawyer holds a B.S. in environmental biology from University of California Davis and an M.S. and Ph.D. in environmental sciences and engineering from the University of North Carolina Gillings School of Public Health.