Speaker Biographies

Howard Bauchner, MD was appointed the 16th Editor in Chief of JAMA and The JAMA Network in 2011. Prior to coming to JAMA, Howard was a Professor of Pediatrics and Public Health at Boston University School of Medicine and Editor in Chief of Archives of Disease in Childhood (2003-2011). At BUSM he was Vice-Chair of Research for the Department of Pediatrics and Chief, Division of General Pediatrics. He is a member of the National Academy of Medicine (formerly the Institute of Medicine) and an honorary fellow of the Royal College of Paediatrics and Child Health, United Kingdom.

At JAMA Howard has focused on improving and expanding clinical content, using electronic/digital approaches to enhance communication, and ensuring a commitment to innovation. Since his arrival in 2011 followers on social media (twitter and Facebook) have increased from 13,000 to approximately 700,000 and the electronic table of contents is now distributed to close to 750,000 individuals each week. In print, via eTOC, and social media JAMA now reaches over 1.5M physicians each week worldwide. Views (PDF and HTML) have increased from 10M in 2011 to 32M in 2017 (50% from outside the U.S.) and podcast downloads have increased from 300,000 in 2014 to 2.2M in 2017. The print journal was redesigned for the first time in over 20 years and website has been updated twice. All 9 of the specialty journals were renamed (Archives of Pediatrics became JAMA Pediatrics), and 3 new journals have been launched – JAMA Oncology (2015), JAMA Cardiology (2016), and JAMA Network Open (2018).

Melissa Begg, ScD received her BS in Mathematics from Fairfield University and her ScD in Biostatistics from Harvard University. She is now Vice Provost for Academic Programs at Columbia University, where she is also a professor of biostatistics in public health. Her areas of focus include: advancing interdisciplinary science; graduate health professional education; and statistical methods in mental and oral health research.

She is a past Co-Director of Columbia’s Irving Institute for Clinical and Translational Research, and has led several training and career development programs that promote diversity in biomedical research. She is a Fellow of the American Statistical Association, and has received Columbia’s Presidential Award for Outstanding Teaching, the Mailman School Teaching Award, and the Lagakos Distinguished Alumni Award in Biostatistics from the Harvard School of Public Health.

* Speaker biographies are subject to change as program continues to evolve prior to March 29, 2019.
Aruturo Casadevall, MD, PhD is a Bloomberg Distinguished Professor and Chair of the W. Harry Feinstone Department of Molecular Microbiology and Immunology at the Johns Hopkins Bloomberg School of Public Health. He obtained his B.A. in Chemistry at Queens College of the City University of New York. Previously, he served as Director of the Division of Infectious Diseases at Montefiore Medical Center, the University Hospital and Academic Medical Center for Einstein, from 2000-2006 and as Chair of the Department of Microbiology and Immunology from 2006-2014.

Dr. Casadevall received both his M.D. and Ph.D. (biochemistry) degrees from New York University. Subsequently, he completed his internship and residency in internal medicine at Bellevue Hospital in New York. He then completed subspecialty training in infectious diseases at Montefiore and Einstein. The author of over 700 scientific papers, numerous books and book chapters, Dr. Casadevall’s major research interests are in fungal pathogenesis and the mechanisms of antibody action. In the area of biodefense, he has an active research program to understand the mechanisms of antibody-mediated neutralization of Bacillus anthracis toxins.

In recent years, Dr. Casadevall has become interested in problems with the scientific enterprise and with his collaborators shown that misconduct accounts for the majority of retracted publications. He has suggested a variety of reforms to the way science is done. Dr. Casadevall is the editor-in-chief of mBio, the first open access general journal of the American Society of Microbiology, and is on the editorial board of several journals including the Journal of Infectious Diseases and the Cell Surface.

He has also served in numerous NIH committees including those that drafted the NIAID Strategic Plan and the Blue Ribbon Panel on Biodefense Research. He served on the National Academy of Sciences panel that reviewed the science on the FBI investigation of the anthrax terror attacks of 2001 and has served on the NAS Committee of Federal Regulations and Reporting requirements. He has also served as a member of the National Science Advisory Board for Biosecurity from 2005-2014. In 2008, he was recognized by the American Society of Microbiology with the William Hinton Award for mentoring scientists from underrepresented groups. In 2015, Dr. Casadevall was appointed a Commissioner to the National Commission on Forensic Science, the United States Department of Justice. He has served as President of the Medical Mycology Society of America, Chair of American Society for Microbiology Division F, Chair of the American Society for Microbiology Career Development Committee, Co-Chair of the National Institute of Allergy and Infectious Diseases Board of Scientific Counselors, and currently serves on the Scientific Council/Advisory Board for the Pasteur Institut and VIB Research Institute in Belgium. He is a member of the American Society for Clinical Investigation, American College of Physicians and the Association of American Physicians, and was elected Fellow of the American Association for the Advancement of Science and the American Academy of Microbiology. In 2014, he became an elected member of the National Academy of Medicine and in 2017, he was elected to the American Academy of Arts and Sciences.
**Leonard P. Freedman, PhD** is Chief Science Officer at the Frederick National Laboratory for Cancer Research. As CSO, Freedman provides internal scientific leadership while building external partnerships and collaborations in science and technology development. His focus is on translating science into medicine to benefit patients suffering from AIDS, cancer, and emerging health challenges.

Previously, Freedman was the founding President of the Global Biological Standards Institute (GBSI), a science policy non-profit based in Washington, DC dedicated to advancing life science standards and best practices through policy initiatives, thought leadership, and education. Dr. Freedman has also held senior positions in academic biomedical research and drug discovery.

Prior to starting GBSI, Dr. Freedman served as Vice Dean for Research and Professor of Biochemistry and Molecular Biology at Jefferson Medical College, Thomas Jefferson University. Dr. Freedman also led discovery research efforts in the pharmaceutical industry as a Vice President at Wyeth and Executive Director at Merck. Before moving to industry, Dr. Freedman was a Member and Professor of Cell Biology & Genetics at Memorial Sloan-Kettering Cancer Center and Weil Cornell Medical College. There, Dr. Freedman and his lab made several highly impactful discoveries in the area of nuclear hormone receptor structure and function.

Dr. Freedman has received numerous competitively funded grants, and has been the recipient of several research honors, including the Boyer Award for Biomedical Research, and a MERIT award from the National Institutes of Health. He was also the 2002 recipient of the Ernst Oppenheimer Award from The Endocrine Society. Dr. Freedman has published extensively and served on numerous scientific review panels and editorial boards. He was an editor of the journal *Molecular and Cellular Biology* for ten years. In addition, Dr. Freedman has served on the Board of Directors of the American Type Culture Collection (ATCC).

Dr. Freedman earned a B.A. degree in Biology from Kalamazoo College, and a Ph.D. in Molecular Genetics from the University of Rochester. He completed his post-doctoral fellowship in the laboratory of Dr. Keith Yamamoto at the University of California, San Francisco.

**Sandra Soo-Jin Lee, PhD** is Chief of the Division of Ethics and Associate Professor in the Department of Medical Humanities and Ethics at Columbia University. Dr. Lee is a medical anthropologist with extensive experience leading empirical bioethics research that focuses on the sociocultural and ethical dimensions of emerging genomic technologies. Before coming to Columbia, Dr. Lee taught for nearly two decades at the Stanford Center for Biomedical Ethics and in the Program in Science, Technology and Society (STS) at Stanford University. She leads studies on the governance and use of biospecimens and patient data in research and the ethics of inclusion and categorizing diversity in studies of human genetic variation. Her projects include *The Ethics of*
Inclusion: Diversity in Precision Medicine Research (1R01HG010330-01), Beyond Consent: Patient Preferences for Governance of Use of Clinical Samples and Data (R01LM012180-01) and Social Networking and Personal Genomics: Implications for Health Research (R01HG005086-01). Dr. Lee has served as Chairperson of the Institutional Review Board at the Cancer Prevention Institute of California and on the NIH/NHGRI Coriell Consultation and Oversight Committee of the International Haplotype Map. Dr. Lee currently serves on both the Scientific Advisory and Bioethics Boards of the Kaiser Permanente National Research Biobank, the NIH/NHGRI Genomics and Society Working Group and on the editorial board of Narrative Inquiry in Bioethics. Dr. Lee received her undergraduate degree in Human Biology from Stanford University and her doctorate from the Joint Program in Medical Anthropology at the University of California, Berkeley and University of California, San Francisco. Her postdoctoral fellowship training in Bioethics and Genetics was in the School of Medicine at Stanford University.

Nicholas Lemann directs Columbia World Projects, a new initiative to use academic work to generate projects outside the academy that address significant challenges for the benefit of humanity. He also directs Columbia Global Reports, a book publishing venture that commissions reporting around the globe on a wide range of political, financial, scientific, and cultural topics.

Mr. Lemann is Dean Emeritus and Pulitzer-Moore Professor of Journalism at Columbia. During his deanship, the Journalism School completed its first capital fundraising campaign, started its first new professional degree program since the 1930s, and launched significant initiatives in investigative reporting, digital journalism, and executive leadership for news organizations. His board memberships include Columbia’s Knight First Amendment Institute, the Authors Guild, and the Russell Sage Foundation. Lemann is a member of the New York Institute for the Humanities and the American Academy of Arts and Sciences, and a staff writer for The New Yorker.

Véronique Kiermer, PhD is the Executive Editor at the Public Library of Science (PLOS), where she works closely with the editorial teams of the seven PLOS journals to continually improve the communication of research and promote open science. Before joining PLOS in 2015, she was Executive Editor and Director of Author and Reviewer Services for Nature Publishing Group. In that capacity she oversaw editorial and research integrity policies across the Nature journals. She started her career in publishing in 2004 as the founding Chief Editor of Nature Methods. Véronique has a PhD in molecular biology from the Université Libre de Bruxelles, Belgium. Before moving into publishing, she did postdoctoral work on HIV transcription in the laboratory of Dr Eric Verdin at the Gladstone Institute, University of California, San Francisco, and worked on gene therapy projects in the biotechnology industry in the Bay Area. She currently serves as chair of the ORCID Board of Directors.
David B. Madigan, PhD, is Professor of Statistics at Columbia University and Dean Emeritus of Arts and Sciences. He received a bachelor’s degree in Mathematical Sciences and a Ph.D. in Statistics, both from Trinity College Dublin. He has previously worked for AT&T Inc., Soliloquy Inc., the University of Washington, Rutgers University, and SkillSoft, Inc. He has over 180 publications in such areas as Bayesian statistics, text mining, Monte Carlo methods, pharmacovigilance and probabilistic graphical models. He is an elected Fellow of the American Statistical Association, the Institute of Mathematical Statistics, and the American Association for the Advancement of Science. He has served terms as Editor-in-Chief of Statistical Science and of Statistical Analysis and Data Mining – the ASA Data Science Journal.

Marcia McNutt, PhD (B.A. in physics, Colorado College; Ph.D. in Earth sciences, Scripps Institution of Oceanography) is a geophysicist and the 22nd president of the National Academy of Sciences.

From 2013 to 2016, she was editor-in-chief of Science journals. McNutt was director of the U.S. Geological Survey from 2009 to 2013, during which time USGS responded to a number of major disasters, including the Deepwater Horizon oil spill. For her work to help contain that spill, McNutt was awarded the U.S. Coast Guard’s Meritorious Service Medal. She is a fellow of the American Geophysical Union (AGU), Geological Society of America, the American Association for the Advancement of Science, and the International Association of Geodesy.

McNutt is a member of the American Philosophical Society and the American Academy of Arts and Sciences, and a Foreign Member of the Royal Society, UK, and the Russian Academy of Sciences. In 1998, McNutt was awarded the AGU’s Macelwane Medal for research accomplishments by a young scientist, and she received the Maurice Ewing Medal in 2007 for her contributions to deep-sea exploration.
Brian Nosek, PhD is co-Founder and Executive Director of the Center for Open Science (http://cos.io/) that operates the Open Science Framework (http://osf.io/). COS is enabling open and reproducible research practices worldwide.

Brian is also a Professor in the Department of Psychology at the University of Virginia. He received his Ph.D. from Yale University in 2002. He co-founded Project Implicit (http://projectimplicit.net/), an multi-university collaboration for research and education investigating implicit cognition—thoughts and feelings that occur outside of awareness or control.

Brian investigates the gap between values and practices, such as when behavior is influenced by factors other than one's intentions and goals. Research applications of this interest include implicit bias, decision-making, attitudes, ideology, morality, innovation, and barriers to change. Nosek applies this interest to improve the alignment between personal and organizational values and practices. In 2015, he was named one of Nature's 10 and to the Chronicle for Higher Education Influence list.

Ericka Peterson, PhD is the Director of the Office of Postdoctoral Affairs, Columbia University. As the Director of the Office of Postdoctoral Affairs at Columbia University in the City of New York, Dr. Peterson is dedicated to the postdoctoral community, providing leadership in comprehensive initiatives, policies, and activities in support of University goals.

Dr. Peterson received a BS in Neuroscience from Westminster College, a Master of Liberal Arts in Interdisciplinary Science from the University of Pennsylvania and a PhD in Medicine from Aarhus University. She was a Postdoctoral Fellow in Neuroscience and Pharmacology at the University of Copenhagen. Following her fellowship, she worked as a Scientific Communications Associate at Precept Medical, a healthcare education and communications company and as a Director of Scientific Communications at Medicus International, a division of Publicis Healthcare Communications Group. As a trained neuroscientist and communication specialist, Dr. Peterson has a combination of academic and professional experience at home and abroad to propel the goals and mission of the Office of Postdoctoral Affairs.
Geraldine L. Richmond, PhD is the Presidential Chair in Science and Professor of Chemistry at the University of Oregon. Her research using laser spectroscopy and computational methods focusses on understanding environmentally and technologically important processes that occur at liquid surfaces.

Richmond is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. She has served in leadership roles on many international, national and state governing and advisory boards. She is currently serving as a member of the National Science Board, as the U.S. Science Envoy to the Lower Mekong River Countries and as Secretary of the American Academy of Arts and Sciences. She is recent past president of the American Association for the Advancement of Science and is the incoming president of the Sigma Xi Scientific Honor Society. Richmond is the founding director of COACh a grass-roots organization formed in 1998 that has helped over 20,000 women scientists and engineers in career advancement in the U.S. and developing countries in Asia, Africa and Latin America.

Awards for her scientific accomplishments include the 2018 Priestley Medal from the American Chemical Society (ACS), the National Medal of Science (2013), the American Physical Society Davisson-Germer Prize (2013), the ACS Joel H. Hildebrand Award in the Theoretical and Experimental Studies of Liquids (2011) the Speirs Medal from the Royal Society of Chemistry (2004) and the ACS Olin-Garvan Medal (1996). Awards for her education, outreach and science capacity building efforts include the ACS Charles L. Parsons Award for Outstanding Public Service (2013), the ACS Award for Encouraging Women in the Chemical Sciences (2005), and the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (1997).

Website: [http://richmondscience.uoregon.edu](http://richmondscience.uoregon.edu)

Shai Silberberg, PhD is the Director for Research Quality at the NIH National Institute of Neurological Disorders and Stroke (NINDS) leading the Institute efforts to increase the excellence of science and the completeness of research reporting. In addition, Dr. Silberberg is a Program Director at NINDS with a focus on the molecular structure, function and regulation of ion channels and transporters. Dr. Silberberg obtained a Ph.D. in Neurophysiology from the Hebrew University in Jerusalem. Prior to joining NINDS, Dr. Silberberg was an Associate Professor at Ben-Gurion University of the Negev in Israel, investigating the biophysical functions and physiological roles of various ion channels.

She was Chief Editor of Nature Reviews Genetics, Senior Editor for genetics and genomics at Nature, Executive Editor for the Nature Partner Journals and Editor in Chief of Nature Communications.

A geneticist by training, she obtained her PhD from University of Cambridge for studies on sex determination at the MRC Laboratory of Molecular Biology, Cambridge, UK. She continued her research at the ICRF Laboratories (CRUK today), London, before turning her attention to scientific publishing.

She is passionate about mentorship, transparent science and clarity in science communication. She has a keen interest in innovation in science publishing.

Pamela H. Smith, PhD, Seth Low Professor of History, Columbia University. Dr. Smith specializes in early modern European history and the history of science. Her current research focuses on attitudes to nature in early modern Europe and the Scientific Revolution, with particular attention to craft knowledge and historical techniques. She is founding director of The Making and Knowing Project, founding director of The Center for Science and Society, and chair of Presidential Scholars in Society and Neuroscience. Dr. Smith received a bachelor’s degree from the University of Wollongong, New South Wales, Australia, in 1979 (First Class Honors), and a PhD from Johns Hopkins University, in 1991. Dr. Smith was the Margaret and Edwin F. Hahn Professor in the Social Sciences, and professor of history at Pomona College from 1990-2005 and the director of European Studies at Claremont Graduate University from 1996-2003.

Maria Zuber, PhD is the E. A. Griswold Professor of Geophysics and Vice President for Research at MIT, where she is responsible for research administration and policy.

She oversees MIT Lincoln Laboratory and more than a dozen interdisciplinary research laboratories and centers, including the Computer Science and Artificial Intelligence Laboratory, Koch Institute for Integrative Cancer Research, the MIT Energy and Environmental Solutions Initiatives, the Plasma Science and Fusion Center, the Research Laboratory of Electronics, the Institute for Soldier Nanotechnologies, and Haystack Observatory. Vice President Zuber is also responsible for intellectual property and research integrity and compliance, as well as research relationships with the federal government.
Zuber’s research bridges planetary geophysics and the technology of space-based laser and radio systems. Since 1990, she has held leadership roles associated with scientific experiments or instrumentation on ten NASA missions, most notably serving as Principal Investigator of the Gravity Recovery and Interior Laboratory (GRAIL) mission.

Zuber holds a B.A. from the University of Pennsylvania and an Sc.M. and Ph.D. from Brown. She has won numerous awards including the MIT James R. Killian Jr. Faculty Achievement Award, the highest honor the MIT faculty bestows to one of its own. She is a member of the National Academy of Sciences and the American Philosophical Society, and is a fellow for the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Geological Society and the American Geophysical Union.

Vice President Zuber is the first woman to lead a science department at MIT and the first to lead a NASA planetary mission. In 2004, she served on the Presidential Commission on the Implementation of United States Space Exploration Policy. In 2002 Discover magazine named her one of the 50 most important women in science and, in 2008, she was named to the USNews/Harvard Kennedy School List of America’s Best Leaders. In 2013, President Obama appointed her to the National Science Board, and in 2016 she was elected Board Chair, a position she held until 2018.