A University Symposium: Promoting Credibility, Reproducibility and Integrity in Research

March 11, 2022

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

Welcome

Thank you to each of you for joining us for A University Symposium: Promoting Credibility, Reproducibility and Integrity in Research.

We have a terrific line-up! The keynote speaker is Naomi Oreskes, author of Why Trust Science? Following her talk, there will be three panels: Diversity, Equity, and Trust in Science; Rigor and Research Integrity in a Public Health Crisis; and Communicating Science to Promote Understanding and Action.

In this program, you will find bios for our distinguished speakers. In addition, each speaker also identified relevant publications for the PCRI Bibliography, which follows the speaker bios in this program. These same materials are also posted on the symposium website, pcri-symposium.net.

We hope you will participate by submitting thoughtful questions in the Q&A box. Again, we welcome you and thank you for joining us today!

A University Symposium: Promoting Credibility, Reproducibility and Integrity
March 11, 2022 | Webinar

Program

9:45 AM

Welcoming Remarks

Welcoming remarks by Jeannette M. Wing and Katrina Armstrong

10:00 – 11:30 AM†

Why Trust Science?

Prof. Naomi Oreskes (Harvard University), a renowned historian of science trained as a geologist, talks about why science should be trusted, how to ensure its objectivity and quality, and how to promote trust in science.

Moderator: Mo Raymo

11:45 – 1:00 PM

Diversity, Equity and Trust in Science

This multidisciplinary panel will discuss the role of diversity and equity in promoting trust and credibility of science, including, for example, addressing bias in artificial intelligence, genomic research as a case study, diversity in clinical trial recruitment, and strategies to promote diversity across the research enterprise.

Moderator: Jeannette M. Wing
Panelists: Vence Bonham, Dana E. Crawford, Jennifer J. Manly

2:00 – 3:15 PM

Rigor and Research Integrity in a Public Health Crisis

A panel including researchers, journal editors, and public health leaders will discuss recent experiences and lessons learned in promoting rigorous COVID-19 research during the pandemic.

Moderator: Marcia McNutt
Panelists: Sri Devi Narasimhan, Arturo Casadevall, Wafaa El-Sadr, Kathleen M. Neuzil

3:45 - 5:00 PM

Communicating Science to Promote Understanding and Action

In this session, panelists will discuss what constitutes effective science communication, how such communication promotes trust in science and how it can prompt action on the issues of the day. Panelists will also provide approaches that researchers at all career stages can use to enhance their own science communication skills and enhance the credibility of science.

Moderator: Chris Wiggins
Panelists: Dominique Brossard, Sudip Parikh, Sylvester James “Jim” Gates, Andy Revkin

† Keynote Presentation

Speakers

Katrina A. Armstrong, MD, leads Columbia University's medical campus as the Executive Vice President for Health and Biomedical Sciences. She is Chief Executive Officer of the Columbia University Irving Medical Center and Dean of the Faculties of Health Sciences and Medicine, which includes Columbia's dental, medical, nursing and public health schools. She is an internationally recognized investigator in medical decision making, quality of care, and cancer prevention and outcomes, an award winning teacher, and a practicing primary care physician. She has served on multiple advisory panels for academic and federal organizations and has been elected to the National Academy of Medicine, the American Academy of Arts and Sciences, the Association of American Physicians, and the American Society for Clinical Investigation. Before joining Columbia, Dr. Armstrong was the Jackson Professor of Clinical Medicine at Harvard Medical School, Chair of the Department of Medicine and Physician-in-Chief of Massachusetts General Hospital, and Professor of Epidemiology at the Harvard T.H. Chan School of Public Health. Before joining Harvard, she was Chief of the Division of General Internal Medicine, Associate Director of the Abramson Cancer Center, and Co-Director of the Robert Wood Johnson Clinical Scholars Program at the University of Pennsylvania. She is a graduate of Yale University (BA degree in architecture), Johns Hopkins (MD degree), and the University of Pennsylvania (MS degree in clinical epidemiology). She completed her residency training in internal medicine at Johns Hopkins.

Vence L. Bonham, Jr., JD is acting deputy director of the National Human Genome Research Institute and a member of the senior leadership team for the institute. Mr. Bonham provides leadership for the institute's health equity and workforce diversity programs and works in partnership across NIH to promote the mission of the institute.

He received his Bachelor of Arts from James Madison College at Michigan State University and his Juris Doctor degree from the Moritz College of Law at Ohio State University. Mr. Bonham was a fellow in the American Association of Medical Colleges Health Services Research Fellowship Program. Mr. Bonham was a tenured faculty member at Michigan State University with appointments in the Colleges of Medicine and Law. He is currently an associate investigator in the National Human Genome Research Institute (NHGRI) within the Division of Intramural Research's Social and Behavioral Research Branch. He leads the Health Disparities Unit, which investigates the equitable integration of new genomic knowledge and precision medicine into clinical settings.

His research focuses primarily on the social implications of new genomic knowledge, particularly in communities of color. He studies how genomics influences the use of the constructs of race and ethnicity in biomedical research and clinical care, and the role of genomics in exacerbating or ameliorating health inequities. The Bonham group also studies sickle cell disease, a condition that will be impacted by emerging curative genomic technologies, but has faced significant health disparities both in the United States and globally.

Dominique Brossard, PhD is professor and chair in the Department of Life Sciences Communication at the University of Wisconsin-Madison and an affiliate of the UW-Madison Robert & Jean Holtz Center for Science and Technology Studies, the UW-Madison Energy Institute, the UW-Madison Global Health Institute, the UW-Madison Nelson Institute for Environmental Studies, and the Morgridge Institute for Research. Her teaching responsibilities include courses in strategic communication theory and research, with a focus on science and risk communication.

Brossard's research agenda focuses on the intersection between science, media and policy with the Science, Media and the Public (SCIMEP) research group, which she co-directs. A fellow of the American Association for the Advancement of Science and of the International Communication Association, Brossard is an internationally known expert in public opinion dynamics related to controversial scientific issues. She is particularly interested in understanding the role of values in shaping public attitudes and using cross-cultural analysis to understand these processes. She has published more than 100 research articles in outlets such as Science, Proceedings of the National Academy of Sciences, Science Communication, Public Understanding of Science, the International Journal of Public Opinion, and Communication Research and has been an expert panelist for the National Academy of Sciences, Engineering and Medicine (NASEM) on various occasions. She currently serves on the NASEM Climate Communication Initiative Advisory Committee as well as on the Executive Committee of the Societal Experts Action Network (SEAN), which aims at facilitating rapid and actionable responses to social, behavioral, and economic-related COVID-19 questions. Brossard is a member of the Board on Life Sciences of the National Academies of Science, Engineering, and Medicine. She is also on the Board of Directors of the American Academy of Political and Social Sciences and she is the Chair of the Advisory Committee for the Social, Behavioral and Economic Sciences at the National Science Foundation.

Brossard has a varied professional background that includes experience in the lab and the corporate world. Notably, she spent five years at Accenture in its Change Management Services Division. She was also the communication coordinator for the Agricultural Biotechnology Support Project II (ABSPII), a position that combined public relations with marketing communication and strategic communication. Her family worked dairy farms for many generations.

Brossard earned her M.S. in plant biotechnology from the Ecole Nationale d'Agronomie de Toulouse and her M.P.S and Ph.D. in communication from Cornell University.

Arturo 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.

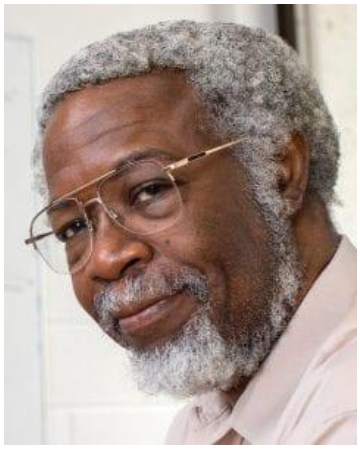
Dr. Casadevall received both his M.D. and Ph.D. (biochemistry) degrees from New York University. Subsequently, he completed his internship and residency in internal medicine at Bellevue Hospital in New York. He then completed subspecialty training in infectious diseases at Montefiore and Einstein. The 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.

Dana E. Crawford, PhD is a clinical psychologist who developed the Crawford Bias Reduction Theory & Training (CBRT), a systematic approach to reducing bias, prejudice, and racism. She has a thriving private practice in Manhattan and has treated patients with high incidences of trauma in Philadelphia, Cincinnati, New Orleans, San Antonio, the Bronx, and New York City. Dr. Crawford is a graduate of Howard, Temple, and Miami universities and has degrees in African American studies, education, and psychology. She has certifications in Practical Nursing, medical hypnosis, and biofeedback. Dr. Crawford completed her pediatric psychology residency at Tulane University School of Medicine, followed by a two–year clinical fellowship with the United States Department of Defense, and then a two-year fellowship with the Center for Early Connections at Tulane University. From 2016- 2020, she worked at Montefiore Medical Center. She was Director of Education and Training for the Behavioral Health Integration Program, Director of the Trauma-Informed Care Program, and an Assistant Professor. In recent years, Dr. Crawford has conducted hundreds of trainings and presentations in academic, private, non-profit, public, and government sectors focused on bias reduction and trauma-informed care. Finally, Dr. Crawford is currently a Scholar in Residence at Columbia University in the Zuckerman Mind Brain Behavior Institute.

Wafaa El-Sadr, MD, MPH, MPA is University Professor of Epidemiology and Medicine, Director of ICAP at Columbia University, Director of Columbia World Projects and the Mathilde Krim-amfAR Professor of Global Health at the Columbia Mailman School of Public Health.
Her work through ICAP in more than 30 countries around the world integrates research, education, training and program design, implementation, scale-up and evaluation. It aims to address major public health challenges through partnership, innovation and collaboration. As the director of Columbia World Projects, she oversees a University-wide initiative which aims at taking scholarly work into action. Dr. El-Sadr is also a principal investigator of the NIH-funded HIV Prevention Trials Network (HPTN).
Dr. El-Sadr received her medical degree from Cairo University in Egypt, a masters degree in public health (Epidemiology) from Columbia Mailman School of Public Health and a masters degree in public administration from the Harvard University Kennedy School of Government. She was named a McArthur fellow in 2008, is a member of the National Academy of Medicine in 2009, a fellow of the African Academy of Sciences in 2018 and a member of the Council for Foreign Relations in 2021.



Sylvester James "Jim" Gates, Jr., PhD is a theoretical physicist. In 2017, Gates retired from the University of Maryland and is currently the Brown Theoretical Physics Center Director, Ford Foundation Professor of Physics, an Affiliate Mathematics Professor, and a Faculty Fellow, Watson Institute for International Studies & Public Affairs at Brown University. While at the University of Maryland, College Park, Gates was a University System Regents Professor, the John S. Toll Professor of Physics, the Director of the String and Particle Theory Center, and Affiliate Professor of Mathematics. Gates served on the U.S. President's Council of Advisors on Science and Technology, contemporaneously on the Maryland State Board of Education from 2009-2016, and the National Commission on Forensic Science from 2013-2016.

He is known for his work on supersymmetry, supergravity, and superstring theory. He received two B.S. degrees and a Ph.D. from the Massachusetts Institute of Technology, where his doctoral thesis was the institution's first on the topic of supersymmetry. In 1984, Gates co-authored Superspace, the first comprehensive book on supersymmetry. He is a past president of the National Society of Black Physicists and an NSBP Fellow, as well as a Fellow of the American Physical Society, the American Association for the Advancement of Science, and the Institute of Physics in the U.K. In 2019, he was elected to the presidential line of the APS where he is currently serving as President-Elect. He is also an elected member of the American Academy of Arts and Sciences and the American Philosophical Society. In 2013, he was elected to the National Academy of Sciences, becoming the first African-American theoretical physicist so recognized in its 150-year history. President Obama awarded Prof. Gates the National Medal of Science at a White House ceremony in 2013.

Jennifer Manly, Ph.D. is a Professor of Neuropsychology in the Department of Neurology at Columbia University Irving Medical Center. Her research focuses on mechanisms of disparities in cognitive aging and Alzheimer's Disease. In order to do this research, her research team has partnered with the Black and Latinx communities in New York City and around the United States to design and carry out investigations of social forces across the lifecourse, such as educational opportunities, racism and discrimination, and socioeconomic status, and how these factors relate to cognition and brain health later in life. Her research has been funded by the National Institutes of Health and the Alzheimer's Association. She has authored over 220 peer-reviewed publications and 10 chapters. She was the 2014 recipient of the Tony Wong Diversity Award for Outstanding Mentorship, and was the recipient of the Paul Satz-International Neuropsychological Society Career Mentoring Award in 2020. She served on the HHS Advisory Council on Alzheimer's Research, Care and Services from 2011 – 2015 and is a member of the National Advisory Council on Aging.

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.

Sri Narasimhan, PhD is Deputy Editor at Cell where she leads journal strategy, inclusion and diversity efforts as well as publication of microbiology, immunology and metabolism content. She also oversees Cell's connection with Cell Press and manages cross-journal communication and collaboration initiatives in the organization. Sri trained in microbiology, molecular genetics and metabolism at the National University of Singapore, UMASS Medical School and Harvard Medical School before joining Cell Press in 2012. She is based in Cambridge, Massachusetts.

Kathy Neuzil, MD, MPH, FIDSA is the Myron M. Levine Professor in Vaccinology, Professor of Medicine and Pediatrics, and the Director of the Center for Vaccine Development and Global Health at the University of Maryland School of Medicine. She is an internationally recognized research scientist and advocate in the field of vaccinology. Throughout her career, Dr. Neuzil has conducted clinical and epidemiologic studies on vaccine-preventable diseases, yielding high-profile publications that inform policy decisions and public health actions. Dr. Neuzil's work has spanned dozens of low-resource countries with multiple vaccines, including influenza, rotavirus, human papillomavirus, Japanese encephalitis, typhoid conjugate vaccines, and most recently, COVID-19 vaccines. Dr. Neuzil is central to the domestic and global response to COVID. As a co-PI of the NIH-funded Leadership Group for the Vaccine and Treatment Evaluation Unit

network, Dr. Neuzil is part of the strategic team evaluating COVID vaccines and therapeutics in the US. Dr. Neuzil also directs TyVAC, the Typhoid Vaccine Acceleration Consortium, with the goal to accelerate the introduction of typhoid conjugate vaccines into low-resource countries. She has more than 240 scientific publications on vaccines and infectious diseases. Dr. Neuzil's research capabilities are complimented by 20 years of involvement in domestic and international policy, including past membership on the US Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices. She is a member of the World Health Organization Strategic Advisory Group of Experts on Immunization and of the prestigious National Academy of Medicine.

Naomi Oreskes, PhD is Professor of the History of Science and Affiliated Professor of Earth and Planetary Sciences at Harvard University. A world-renowned geologist, historian and public speaker, she is a leading voice on the role of science in society and the reality of anthropogenic climate change.

Oreskes is author or co-author of 7 books, and over 150 articles, essays and opinion pieces, including Merchants of Doubt (Bloomsbury, 2010), The Collapse of Western Civilization (Columbia University Press, 2014), Discerning Experts (University Chicago Press, 2019), Why Trust Science? (Princeton University Press, 2019), and Science on a Mission: American Oceanography
from the Cold War to Climate Change, (University of Chicago Press, forthcoming). Merchants of Doubt, co-authored with Erik Conway, was the subject of a documentary film of the same name produced by participant Media and distributed by SONY Pictures Classics, and has been translated into nine languages. A new edition of Merchants of Doubt, with an introduction by Al Gore, will be published in 2020.

Oreskes wrote the Introduction to the Melville House edition of the Papal Encyclical on Climate Change and Inequality, Laudato Si, and her essays and opinion pieces on climate change have appeared in leading newspapers around the globe, including The New York Times, The Washington Post, The Los Angeles Times, the Times (London), and Frankfurter Allegemeine. Her numerous awards and prizes include the 2019 Geological Society of American Mary C. Rabbitt Award, the British Academy Medal 2019, the 2016 Stephen Schneider Award for outstanding Climate Science Communication, the 2015 Public Service Award of the Geological Society of America, the 2015 Herbert Feis Prize of the American Historical Association for her contributions to public history, and the 2014 American Geophysical Union Presidential Citation for Science and Society. She is a fellow of the American Geophysical Union, the Geological Society of America, the American Association for the Advancement of Science, the American Academy of Arts and Sciences, and the American Philosophical Society.

In 2018 she was named a Guggenheim Fellow for a new book project with Erik Conway, "The Magic of the Marketplace: The True History of a False Idea," which will be published by Bloomsbury Press as soon as it is finished.

Photo by Kayana Szymczak.

Sudip Parikh, PhD, became the 19th chief executive officer of the American Association for the Advancement of Science (AAAS) and executive publisher of the Science family of journals in January 2020. Parikh has spent two decades at the nexus of science, policy, and business.

Immediately prior to joining AAAS, Parikh was senior vice president and managing director at DIA Global, a neutral, multidisciplinary organization bringing together regulators, industry, academia, patients, and other stakeholders interested in healthcare product development. He led strategy in the Americas and oversaw DIA programs that catalyzed progress globally toward novel regulatory frameworks for advanced therapies not amenable to existing regulations.

Prior to DIA, Sudip was general manager of the Health and Consumer Solutions business unit and vice president at Battelle, a multibillion-dollar research and development organization. He led a $150 million business unit with over 500 scientific, technical, and computing experts performing basic and applied research, developing medicines and healthcare devices, and creating advanced analytics and artificial intelligence applications to improve human health. Previously, Parikh led Battelle's global AgriFood business unit. Headquartered in London and Geneva, this unit provided environmental fate research and agriculture product development services from laboratories throughout Europe and the United States.

From 2001 to 2009, Parikh served as science advisor and professional staff to the United States Senate Appropriations Committee, where he was responsible for negotiating budgets for the National Institutes of Health (NIH), Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, Biomedical Advanced Research and Development Authority, and other scientific and health agencies. A key legislative liaison to the research and development ecosystem, Parikh was on the frontlines of many science policy issues debated during that time, including embryonic stem cell research, cloning, disease surveillance, bioterrorism, cyber security, and doubling the NIH budget.
An active member of the scientific advocacy community, Parikh serves as a board member and officer for several impactful organizations, including Research!America, Friends of Cancer Research, and ACT for NIH. He has received multiple public service awards, including recognition from the American Association of Immunologists, the National AIDS Alliance, the Coalition for Health Services Research, and the Juvenile Diabetes Research Foundation.

Sudip is committed to early STEM education and, as a parent of three energetic young children, he prioritizes volunteering as a mentor for Science Olympiad teams at two elementary schools.
Early in his career, Parikh was a Presidential Management Intern at the NIH. He was awarded a National Science Foundation Graduate Research Fellowship while earning his Ph.D. in macromolecular structure and chemistry from the Scripps Research Institute in La Jolla, Calif. There, he used structural biology and biochemistry techniques to probe the mechanisms of DNA repair enzymes bound to DNA.
The son of Indian immigrants who worked in the textile and furniture manufacturing plants of North Carolina, Parikh completed undergraduate studies at the University of North Carolina at Chapel Hill, first as a journalism major before switching into materials science.

Maureen "Mo" Raymo, PhD is a marine geologist and climate scientist who works at Columbia University's Lamont-Doherty Earth Observatory where she is the G. Unger Vetlesen Professor of Earth and Climate Sciences, Co-Founding Dean of the Columbia Climate School, as well as Director of LDEO. Prof. Raymo's research focuses on the history and causes of climate change in the past including understanding the consequences of climate change for sea level and ice sheet stability.

Her research has been profiled in the New York Times, the Washington Post, The Atlantic, The New Yorker, U.S. News and World Report, Discover Magazine, and elsewhere and featured on television via the History Channel, BBC World Service, BBC's Planet Earth, PBS Newshour as well as numerous other podcasts and radio segments. Her Uplift-Weathering Hypothesis that addresses why climate changes on geologic timescales was the subject of both a PBS Nova and BBC Horizon documentary.

Prof. Raymo has spent many months at sea and in the field studying how the Earth works, leading or participating in numerous scientific expeditions. She has published over 100 peer-reviewed scientific publications, including ten in Science or Nature. She has given hundreds of invited science presentations and spoken to dozens of public audiences about climate change. A fellow of the National Academy of Science, the American Association for the Advancement of Science, the American Geophysical Union, The Geological Society of London, and The Explorer's Club, in 2014 she became the first woman to be awarded the Wollaston Medal, the Geological Society of London's most senior medal previously award to William Smith, Charles Lyell, Louis Agassiz and Charles Darwin. In December of 2019 she was awarded the Maurice Ewing Medal by the AGU and U. S. Navy "for significant original contributions to the ocean sciences".

Andrew Revkin is one of America's most honored and experienced environmental journalists and the founding director of the Initiative on Communication and Sustainability at Columbia University's Climate School.

At Columbia he is building programs, courses, tools and collaborations bridging communication gaps between science and society to cut climate risk and boost social and environmental resilience. He launched and runs the school's Sustain What webcast, which has reached more than 1.5 million people in 200-plus episodes, and writes a column with the same name on Bulletin.com, a new platform for independent journalists backed by Facebook.

Revkin has written on climate change for more than 30 years, reporting from the North Pole to the White House, the Amazon rain forest to the Vatican - mostly for The New York Times. He has held positions at National Geographic and Discover Magazine and won the top awards in science journalism multiple times, along with a Guggenheim Fellowship. Revkin has written lauded books on the Anthropocene, the history of humanity's relationship with weather, the changing Arctic, global warming and the assault on the Amazon rain forest, as well as three book chapters on science communication. In spare moments, he's a performing songwriter.
Learn more: https://linktr.ee/revkin

Chris Wiggins, PhD is an associate professor of applied mathematics at Columbia University and the Chief Data Scientist at The New York Times. At Columbia he is a founding member of the executive committee of the Data Science Institute, and of the Department of Applied Physics and Applied Mathematics as well as the Department of Systems Biology, and is affiliated faculty in Statistics. He is a co-founder and co-organizer of hackNY (http://hackNY.org), a nonprofit which since 2010 has organized once a semester student hackathons and the hackNY Fellows Program, a structured summer internship at NYC startups.
Prior to joining the faculty at Columbia he was a Courant Instructor at NYU (1998-2001) and earned his PhD at Princeton University (1993-1998) in theoretical physics. He is currently writing a book on the history and ethics of data with Professor Matt Jones (Columbia), forthcoming from W. W. Norton & Company, as well as a book on data science with Al Spector, Peter Norvig, and Jeanette Wing. He is a Fellow of the American Physical Society and is a recipient of Columbia's Avanessians Diversity Award.
Pronouns: he/him
twitter: @chrishwiggins

Jeannette M. Wing, PhD is the Executive Vice President for Research at Columbia University and Professor of Computer Science. In her EVPR role, she has overall responsibility for the University's research enterprise at all New York locations and internationally. The New York locations include the Morningside and Manhattanville campuses, Columbia University Irving Medical Center, Lamont-Doherty Earth Observatory, and Nevis Laboratories. She joined Columbia in 2017 as the inaugural Avanessians Director of the Data Science Institute.

Prior to Columbia, Dr. Wing was Corporate Vice President of Microsoft Research, served on the faculty and as department head in computer science at Carnegie Mellon University, and served as Assistant Director for Computer and Information Science and Engineering at the National Science Foundation.

Dr. Wing's research contributions have been in the areas of trustworthy AI, security and privacy, specification and verification, concurrent and distributed systems, programming languages, and software engineering. Her 2006 seminal essay, titled "Computational Thinking,'' is credited with helping to establish the centrality of computer science to problem-solving in fields where previously it had not been embraced, and thereby influencing K-12 and university curricula worldwide.

She is a Fellow of the American Academy of Arts and Sciences, American Association for the Advancement of Science, the Association for Computing Machinery (ACM), and the Institute of Electrical and Electronic Engineers. She received distinguished service awards from the ACM and the Computing Research Association and an honorary doctorate degree from Linköping University, Sweden. She earned her bachelor's, master's, and doctoral degrees in computer science, all from the Massachusetts Institute of Technology.

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