

On Leading a Lab: Strengthening Scientific Leadership in Responsible Research, A Workshop

Speaker Biographies

Introduction

France Córdoba, PhD, is the President of the Science Philanthropy Alliance. She is an experienced leader in science, engineering and education with more than three decades experience at universities and national labs. She has served in five presidential administrations, both Democratic and Republican. She is an internationally recognized astrophysicist for her contributions in space research and instrumentation. She has served on both corporate and nonprofit boards, often assuming a leadership position.

Córdoba was the 14th Director of the National Science Foundation (NSF), a presidential-appointed, Senate-confirmed executive position. NSF is an \$8.5 billion independent federal agency. It is the only government agency charged with advancing all fields of scientific discovery, technological innovation, and STEM education.

Through her leadership at NSF, the agency grew by over one billion dollars, strengthened existing partnerships while forging new ones, and launched a strategic framework defined by 10 Big Ideas—promising areas of research for targeted investment. She initiated NSF's Convergence Accelerator to leverage external partnerships to accelerate research in areas of national importance. To broaden STEM participation from traditionally underrepresented groups, she launched NSF INCLUDES; today seven other government agencies, including NASA and NIH, have joined INCLUDES. She co-chaired with other agency heads several committees of the National Science and Technology Council for the White House Office of Science and Technology Policy, including committees on science, education, innovation, and Arctic research. She has spoken before the U.S. Congress and on global stages including the Global Research Council, Arctic Ministerials, and the World Economic Forum.

She is the only woman to serve as president of Purdue University, where she led the university to record levels of research funding, reputational rankings, and student retention and graduation rates. She established a College of Health and Human Sciences at Purdue, as well as a Global Research Policy Institute.

Córdoba is also chancellor emerita of the University of California, Riverside, where she was a distinguished professor of physics and astronomy. She laid the foundation for a medical school, California's first public medical school in over 40 years. At the University of California, Santa Barbara, as vice chancellor for research and professor of physics, she led a campus-wide effort to fund and support convergence in blue-sky research.

Previously, Córdoba served as NASA's chief scientist, representing NASA to the larger scientific community. She was the youngest person and first woman to serve as NASA's chief scientist and was awarded the agency's highest honor, the Distinguished Service Medal.

She has published more than 150 scientific papers. She has been awarded several honorary doctorates, including ones from Purdue, Duke and Dartmouth Universities. She was awarded the Kennedy-Lemass Medal from Ireland, and the Order of Bernardo O'Higgins from Chile. She is a Kilby Laureate for "significant contributions to society through science, technology, innovation, invention and education." Córdova received her Bachelor of Arts degree from Stanford University and her PhD in physics from the California Institute of Technology.

Chair's Opening Remarks and Goals for the Meeting

Michele Masucci, PhD, is the Vice Chancellor for Research and Economic Development at the University System of Maryland. She also holds the position of Professor of Geography and Environmental Systems at the University of Maryland Baltimore County and an appointment as Research Faculty at the University of Maryland College Park. She previously served as the Vice President for Research at Temple University, Director of the Information Technology and Society Research Group and Professor and Chair of the Department of Geography and Urban Studies. In her current position, she is responsible for advancing research and economic development strategy, workforce development, technology commercialization, and innovation across the institutions of the University System of Maryland and the system's Board of Regents. At Temple University, she led research for 10 years, overseeing its rise as the 4th fastest growing research enterprise in the U.S. based on research expenditures. She also leads the Federal Demonstration Partnership as the Faculty Co-Chair and President of the Federal Demonstration Partnership Foundation.

Dr. Masucci's research examines how barriers to accessing information resources using geographic information technologies are interrelated with community development and environmental quality problems, including accessing health, education and social services. She led the Building Information Technology Skills (BITS) program for the past 20 years funded by the National Science Foundation, Knight Foundation, Economic Development Agency, Philadelphia Youth Network, and many other sponsors since its inception. Her work on identifying criteria for assessing appropriate use of information technology in marginalized community settings is the focus of numerous peer reviewed publications and books. She has also worked to develop university-community partnerships with organizations that address human rights issues, and with a number of national and international community and environmental planning organizations.

Session 1

Susan M. Wolf, JD, is Regents Professor; McKnight Presidential Professor of Law, Medicine & Public Policy; Faegre Baker Daniels Professor of Law; Professor of Medicine; and Chair of the Consortium on Law and Values in Health, Environment & the Life Sciences at the University of Minnesota. She is a member of the National Academy of Medicine, fellow of the American Association for the Advancement of Science, member of the American Law Institute, and fellow of The Hastings Center. She has published extensively on legal, ethical, and policy issues in health care, biomedical research, and emerging technologies, with articles in Science; New

England Journal of Medicine; JAMA; Genetics in Medicine; Journal of Law, Medicine & Ethics; and others.

Her research has been funded by the National Institutes of Health, National Science Foundation, Robert Wood Johnson Foundation, and Greenwall Foundation, among others. She has served on numerous advisory bodies including the National Academies Committee on Science, Engineering, Medicine, and Public Policy (COSEMPUP); National Science Advisory Board for Biosecurity; Association of American Law Schools, Section on Law, Medicine & Health Care (past-Chair); American Society for Bioethics and Humanities, Board of Directors; and Minnesota COVID Ethics Collaborative (Co-Lead). In addition to serving on COSEMPUP, Prof. Wolf has served on two consensus committees for the National Academies, has reviewed proposed committee reports, and has served as a speaker for multiple workshops. Prof. Wolf earned her J.D. from Yale Law School in 1980 and A.B. (with highest honors) from Princeton University in 1975. She was a National Endowment for the Humanities Fellow and then Associate for Law at The Hastings Center (1984-92), then a Fellow in Harvard University's Program in Ethics and the Professions (1992-93), before joining the faculty at the University of Minnesota.

Maria Zuber, PhD, is Vice President for Research and E. A. Griswold Professor of Geophysics 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 Koch Institute for Integrative Cancer Research, the MIT Energy and Environmental Solutions Initiatives, the Plasma Science and Fusion Center, and the Research Laboratory of Electronics. She also oversees MIT's Climate Action Plan for the Decade.

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 a dozen 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 BA from the University of Pennsylvania and an ScM and PhD from Brown. She is a member of the National Academy of Sciences and the American Philosophical Society, and is a fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, 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 2013, President Obama appointed her to the National Science Board, and in 2018 she was reappointed by President Trump. She served as Board chair from 2016-2018. In 2021, President Biden named Zuber as co-chair of the President's Council of Advisors on Science and Technology (PCAST).

Michael Witherell, PhD, is Director of Lawrence Berkeley National Laboratory and Professor of Physics. Previously he was Vice Chancellor for Research and held the Presidential Chair in

Physics at the University of California, Santa Barbara, and before that he was Director of Fermi National Accelerator Laboratory (Fermilab).

Witherell received his B.S. from the University of Michigan and his PhD in experimental particle physics from the University of Wisconsin. He then served on the faculty at Princeton and at UC Santa Barbara. He won the W. K. H. Panofsky Prize in Experimental Particle Physics from the American Physical Society in 1990 and was elected to the National Academy of Sciences in 1998.

Gerald (Jay) Goodwin, PhD, (ST – Personnel Sciences), is the Senior Research Scientist of the U. S. Army Research Institute for Behavioral and Social Sciences (ARI). He advises ARI's Director on scientific matters, mentors ARI's scientific staff, and provides guidance and oversight of the Team Effectiveness portfolio of research across ARI's research program. He is one of the Army's senior scientific experts on topics in personnel science for Army senior leaders. He advises the Army's Talent Management Task Force (ATMTF) and is coordinating ARI's efforts in support of the ATMTF. He also leads the Talent Management line of effort within Army Future Command's Maximizing Human Potential.

Dr. Goodwin's research expertise is in team and organizational effectiveness, leadership, and cultural factors in Joint, Interagency, and Multinational contexts. Prior to his current assignment, he was Chief of the Foundational Science Research Unit where he directed ARI's basic research investments, and has led basic and applied research programs in leader development, team and organizational effectiveness, and cross-cultural issues throughout his career. He has served as Acting Chief of ARI's Program, Budget, and Strategy Office multiple times, as well as leading ARI's Strategic Initiatives Group. He has served as a behavioral science expert in multiple long-range R&D strategic planning efforts for the Army and Department of Defense. He was detailed to the Department of Defense Comprehensive Review Working Group as a research analyst and the lead writer the DOD report assessing the impact of repeal of "Don't Ask, Don't Tell." He was previously employed at the American Institutes for Research, where his project work included personnel selection, test development, employment litigation support with an emphasis on statistical analysis, and performance modeling.

Dr. Goodwin received his MS and PhD in Industrial/Organizational Psychology from the Pennsylvania State University. He is a Fellow of the Society for Industrial and Organizational Psychology, and the American Psychological Association (APA).

Session 2

Robin S. Broughton, PhD, is Director of Cultural Innovations within the Center for the Advancement of Science Leadership & Culture at the Howard Hughes Medical Institute (HHMI). In this capacity, she leads development of scientific professional development programs that center principled leadership and effective mentorship. In the decade before joining HHMI, Robin worked at the National Institutes of Health (NIH) where she managed grants and contracts to help support various types of research and research education efforts. At the National Institute

of Allergy and Infectious Diseases, she managed a portfolio of product development and preclinical service contracts aimed at supporting development of anti-infective agents targeting emerging infectious diseases and biodefense threats. In addition, she served as a Program Officer in the Division of Training, Workforce Development and Diversity at the National Institute of General Medical Sciences and was an AAAS Science & Technology Policy Fellow in the Office of Cancer Genomics at the National Cancer Institute. Prior to NIH, she was faculty in the Department of Microbiology and Immunology at Meharry Medical College. Robin has a B.S. in Microbiology from North Carolina State University and a PhD in Microbiology and Immunology from the Wake Forest University School of Medicine.

Michael O'Rourke, PhD, is Professor of Philosophy and faculty in AgBioResearch and Environmental Science & Policy at Michigan State University. He is Director of the Toolbox Dialogue Initiative, an NSF-sponsored research consortium that investigates philosophical approaches to facilitating interdisciplinary research (<http://tdi.msu.edu/>), Executive Director of the Toolbox Dialogue Initiative Center, a service center at MSU that is the principal locus of Toolbox work, and former Director of the MSU Center for Interdisciplinarity. His research interests include interdisciplinary theory, epistemology, communication and epistemic integration in collaborative, cross-disciplinary research, responsible conduct of research, and linguistic communication between intelligent agents.

Tristan McIntosh, PhD, is an Assistant Professor of Medicine in the Bioethics Research Center at Washington University School of Medicine in the Division of General Medical Sciences. Dr. McIntosh earned her Master's and PhD in Industrial-Organizational Psychology with a minor in Quantitative Psychology at the University of Oklahoma, where her scholarly work focused on ethics, innovation, and leadership. Currently, Dr. McIntosh conducts federally-funded and foundation-funded research on ethical and social issues that arise in science and medicine at individual, team, and institutional levels.

Her research interests include the responsible conduct and commercialization of research, cultivating inclusive research workplace cultures through lab leadership and management, professional decision-making, and identifying and responding to root causes of noncompliance and wrongdoing in research. Dr. McIntosh also has expertise in developing and assessing ethics education programs. She is the co-director of Compass, a leadership and management training and mentoring program for early-career researchers.

Catherine Lyall, PhD, is Emerita Professor of Science and Public Policy at the University of Edinburgh, UK. Following a variety of professional roles and graduate studies in science policy, she became a very practice-based university researcher. With interests in research policy and knowledge exchange, she eventually found her niche with like-minded international scholars when she developed research interests and expertise in interdisciplinarity. She has shared this hard-won learning in *Foundations of Interdisciplinary and Transdisciplinary Research: A Reader* (with Vienni-Baptista and Fletcher, Bristol University Press, 2023) and *Being an Interdisciplinary Academic: How Institutions Shape University Careers* (Palgrave Macmillan, 2019).

Session 3

Lyric Jorgenson, PhD, is the Acting Associate Director for Science Policy and the Acting Director of the Office of Science Policy at the NIH. In this position, she provides senior leadership in the development and oversight of cross-cutting biomedical research policies and programs considered to be of high-priority to NIH and the United States Government.

Prior to this role, she served in numerous roles across the agency, including Deputy Director of the Office of Science Policy, and has led the development of numerous high impact science and policy initiatives such as the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative and the National Center for Advancing Translational Sciences (NCATS). Dr. Jorgenson also served as the Deputy Executive Director of the White House Cancer Moonshot Task Force in the Office of the Vice President in the Obama administration, where she directed and coordinated cancer-related activities across the Federal government and worked to leverage investments across sectors to dramatically accelerate progress in cancer prevention.

Lyric received a doctorate degree from the Graduate Program for Neuroscience at the University of Minnesota-Twin Cities where she conducted research in neurodevelopment with a focus on learning and memory systems. She earned a Bachelor's degree in Psychology from Denison University.

Kara L. Hall, PhD, is a Health Scientist, Director of the Science of Team Science (SciTS), and Director of the Theories Initiative in the Health Behaviors Research Branch (HBRB) at the National Cancer Institute (NCI). During her career, Dr. Hall has conducted and championed behavioral and social science (BSS) research in areas spanning health behavior theory, systems science, health promotion and disease prevention interventions, implementation science, and emerging cancer-related areas, such as sleep and circadian function and the intersection of climate change, behavior change, and health.

At NCI, Dr. Hall aims to advance BSS by fostering cross-disciplinary collaborations with researchers from across the biomedical community, and beyond. To this end, Dr. Hall has conducted numerous studies and developed new metrics, measures, and models for understanding, evaluating, and supporting transdisciplinary research, collaboration, and training. She helped launch the SciTS field with key efforts such as co-chairing the field's first conference in 2006 and co-editing the associated special supplement entitled, *The Science of Team Science: Assessing the Value of Transdisciplinary Research* in the *American Journal of Preventive Medicine* (2008). She has served leadership roles for the Annual International SciTS Conference since its inception in 2010 and as a founding board member of the International Network for the Science of Team Science (INSciTS) and the Global Alliance for inter- and transdisciplinarity (ITD-Alliance). Dr. Hall served as a member of The National Academies Committee on the Science of Team Science (2012-15) with the resulting report, *Enhancing the Effectiveness of Team Science*, highlighted as the third- most downloaded National Academies Press report in 2015. She has also developed practical resources, including NCI's Team Science Toolkit and *Strategies for Team Science Success: Handbook of Evidence-Based*

Principles for Cross-Disciplinary Science and Practical Lessons Learned from Health Researchers (2019).

Dr. Hall earned her master's degree in psychology (clinical) and doctorate degree in psychology (experimental) from the University of Rhode Island (URI), with specializations in neuropsychology and behavioral science. Dr. Hall was awarded fellowships from the University of Rhode Island, American Cancer Society, and National Cancer Institute and is a graduate of the NCI Senior Executive Enrichment & Development Program and the NIH Senior Leadership Program.

Dr. Hall has provided leadership for more than 40 scientific meetings/workshops, served as a member of 20 external advisory committees/workgroups, authored more than 50 publications, and presented nearly 200 talks, including dozens of keynote lectures. She is a recipient of more than 30 awards and honors from organizations such as the Society of Multivariate Experimental Psychology and the Society of Behavioral Medicine. Notably, Dr. Hall received the Science of Team Science Recognition Award for her vision, dedication, and leadership in helping to establish and continue to advance the Science of Team Science field (2017) and was awarded the American Psychological Association's Research Service Commendation for outstanding contributions to psychological science in the advancement of interdisciplinary team science (2021).

Dragana Brzakovic, PhD, started in the Office of Integrative Activities in 2000 by running the Science and Technology Centers (STC): Integrative Partnerships competition. She also coordinated Major Research Instrumentation program for the National Science Foundation in period 2003-2006. During 2007 Dr. Brzakovic spent on the Capital Hill as Brookings Legislative Fellow. Dr. Brzakovic's current responsibilities include oversight of 11 centers in the STC program and coordination of the NSF Centers Forum. She is also involved in various other cross-disciplinary activities.

Prior to NSF Dr. Brzakovic held positions of Professor of Electrical Engineering and Computer Science at Lehigh University (1992-2000) and Associate Professor of Electrical Engineering at the University of Tennessee-Knoxville (1989-1992). During her academic career her primary research interests were in the area of computer vision and image understanding.

Dr. Brzakovic received her PhD and ME degrees from University of Florida, and her B.S. degree from University of Belgrade, all in Electrical Engineering.

Session 4

Stephen M. Fiore, PhD, is Director, Cognitive Sciences Laboratory, and Pegasus Professor with the University of Central Florida's Cognitive Sciences Program in the Department of Philosophy and Institute for Simulation and Training. Dr. Fiore is past-president of, and was a founding board member for, the International Network for Science of Team Science (INSciTS). He is also a founding board member and past president of the Interdisciplinary Network for

Group Research. Dr. Fiore maintains multidisciplinary research interests that incorporate aspects of the cognitive, social, organizational, and computational sciences in the investigation of learning and performance in individuals and teams.

Brian Uzzi, PhD, is the Richard L. Thomas Distinguished Professor of Leadership at the Kellogg School of Management, Northwestern University. He also is Co-Director of the Northwestern University Institute on Complex Systems and Data Science (NICO), holds professorship in sociology and the McCormick School of Engineering, and writes a column on AI and business for Forbes.

Brian's work focuses on the link between social networks and human achievement and the role of AI in complex human decision making.

Brian has been awarded over 30 teaching and research prizes worldwide, including the Euler Award, been on the faculties of Harvard, INSEAD, University of Chicago, and Berkeley, and is a Fellow of the Network Science Society. His work has been funded by DARPA, NSF, and other foundations, is widely cited, and appears frequently in major media outlets worldwide.

Before entering science, Brian was a carpenter and a musician. His PhD is from Stony Brook University in sociology.

Maritza Salazar Campo, PhD, has been a faculty member of The Paul Merage School of Business since 2016. Her impactful contributions have earned her recognition through her scholarly publications and numerous teaching, mentorship, and civic awards, including being named by the OC Business Journal as one of the OC 50 shaping the future of healthcare in Orange County.

Professor Salazar Campo's academic journey began as an Assistant Professor of Organization and Management, focusing on identifying factors that drive the effectiveness of high-performance teams and organizations across various industries, ranging from professional services to healthcare. Her research delves into the intricate dynamics of these units, yielding groundbreaking insights that enhance the ability of leaders and teams to work together under challenging circumstances, like job strain, task complexity, and cultural distance.

Embracing a multidisciplinary approach, Professor Salazar Campo leverages various research methodologies, including detailed case studies, comprehensive survey research, and field experiments, to test and develop new interventions to enhance functioning and yield outcomes. From these studies, supported by the National Institute of Health and the National Science Foundation, Dr. Salazar Campo has generated numerous evidence-based training interventions and curricula to support improved performance in collaboration in medicine, data science, and professional services firms.

In the classroom, Dr. Salazar Campo draws on these research insights to inform her teaching and consulting, providing exclusive insights to those she instructs and works with. As such, she is a sought-after consultant and advisor, sharing her expertise to support collaborative

excellence, psychological safety, and inclusion in the workplace. As a Latina/Chicana scholar, Dr. Salazar Campo is also proud to serve as the faculty lead of the Latinx Initiative at the Paul Merage School of Business to support the academic and professional advancement of Latinos in for-profit and non-profit organizations.

Session 5

Umut A. Gurkan, PhD, is the Wilbert J. Austin Professor of Engineering with tenure at Case Western Reserve University. Dr. Gurkan's research expertise is on global equitable access to diagnostics and personalized health. Dr. Gurkan has authored over 100 peer-reviewed publications. Dr. Gurkan's inventions have led to 13+ issued US patents and four successful biotechnology companies to date with products in global markets. Dr. Gurkan's innovations won numerous awards, including USPTO Patents for Humanity recognition and USFDA Breakthrough Device Designation. His honors include National Science Foundation CAREER Award, the American Society for Engineering Education Curtis W. McGraw Research Award Finalist, Translational Research Featured New Investigator Award, the Biomedical Engineering Society Rising Star Award, MIT Technology Review Innovator under 35 Award, and the Doris Duke Innovations in Clinical Research Award. Dr. Gurkan is a Senior Member of the National Academy of Inventors (NAI), a member of the New Voices in Science, Engineering and Medicine Program by the National Academies of Sciences, Engineering, and Medicine (NASEM), and a fellow of the American Institute for Medical and Biological Engineering (AIMBE). Dr. Gurkan holds BS degrees in Chemical Engineering and Mechanical Engineering from the Middle East Technical University in Turkey and a PhD in Biomedical Engineering from Purdue University. He completed his postdoctoral training at Harvard Medical School and Harvard-MIT Health Sciences and Technology.

James DuBois, PhD, is the Steven J. Bander Professor of Medical Ethics and Professionalism, Professor of Psychology and Professor of Medicine as well as the Director of the Center for Clinical and Research Ethics at Washington University School of Medicine in the Division of General Medical Sciences. He is an Adjunct Professor in the Albert Gnaegi Center for Health Care Ethics at Saint Louis University, where he was the inaugural Hubert Mäder Professor of Health Care Ethics and Director of the Bander Center for Medical Business Ethics. DuBois completed his PhD in philosophy at the International Academy of Philosophy in Liechtenstein and his DSc in psychology at the University of Vienna in Austria, where he focused on cross-cultural moral psychology. He directs the NIH-funded Professionalism and Integrity Program (PI Program), which offers personalized assessments, a group workshop, and post-workshop coaching calls to help researchers operate professionally in today's complex environments. He is the founding Editor (with Ana Iltis) of *Narrative Inquiry in Bioethics: A Journal of Qualitative Research*, published by Johns Hopkins University Press. He is a Board Certified Coach (BCC) specialized in career coaching for researchers.

DuBois directs the Professional and Social Issues Lab within the Department of Medicine, which conducts social science research aimed at understanding barriers and facilitators to research integrity and professionalism.

C.K. Gunsalus, JD, is a nationally recognized expert, speaker, author and workshop presenter on matters of research integrity, ethics and professionalism in academia. She is the Director of the National Center for Professional and Research Ethics (NCPRE), Professor Emerita of Business, and Research Professor at the Coordinated Sciences Laboratory. Gunsalus was the PI for the centerpiece project of NCPRE, Ethics CORE, a national online ethics resource center initiated with \$1.5M from the National Science Foundation. She has been on the faculty of the colleges of Business, Law and Medicine at the University of Illinois at Urbana-Champaign and served as Special Counsel in the Office of University Counsel. She started her career at the Computer-based Education Research Laboratory, which developed the PLATO project. Gunsalus graduated Magna Cum Laude from the University of Illinois College of Law and has an AB with Distinction in History from the University of Illinois at Urbana-Champaign. She is licensed to practice law in the state of Illinois.

Lloyd Munjanja, PhD, Dr. Munjanja holds a Bachelor of Science in Chemistry from the College of St. Scholastica in Minnesota, and he completed his PhD in Organometallic Chemistry at the University of Rochester in New York. During his time at the University of Rochester, Dr. Munjanja developed a deep interest in advocating for and supporting the professional success of scientists (students, staff, faculty and administrators) from traditionally underrepresented backgrounds.

He has spearheaded initiatives promoting equity in science at various institutions, including a National Science Foundation research center, private and public R1 institutions. Dr. Munjanja is an active member of numerous professional organizations, including the American Chemical Society (ACS), National Association of Diversity Officers in Higher Education (NADOHE), National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), and Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS), among others.

His dedication to diversity, equity, and inclusion (DEI) has earned him recognition, including prestigious awards such as the American Chemical Society's Stanley C. Israel Award for Advancing Diversity in Chemical Sciences and the Ebony Excellence Award at the University of Illinois Urbana Champaign. Currently, he serves as the Senior Community Engagement Officer in the Office of the Senior Vice-Provost for Research at the Massachusetts Institute of Technology (MIT).

What's at Stake for Research Institutions and the Broader Enterprise: A Conversation

Timothy A. Akers, PhD, currently serves as the Assistant Vice President for Research Innovation and Advocacy and Professor of Public Health at Morgan State University (MSU). With a diverse professional background spanning academia, government, military, and private

sector, Dr. Akers has held positions such as Senior Behavioral Scientist at the U.S. Centers for Disease Control and Prevention (CDC) and Senior Research Scientist at Michigan State University's College of Human Medicine, David Walker Research Institute.

Dr. Akers' research expertise spans the social, behavioral, environmental, life, computational, and physical sciences, to include engineering. His more noted research areas of expertise are in the areas of quantum literacy, quantum information science, epidemiological criminology, HIV/AIDS prevention, health informatics, and health disparities. He is the founder and CEO of the National Quantum Literacy Network (NQLN) and has served on various advisory boards and committees, including the National Quantum Initiative Advisory Committee (NQIAC), the National Advisory Board to Dia de la Mujer Latina, and the Intercultural Center for Health, Research, and Wellness.

Some of Dr. Akers' major honors include the 2022 National Trailblazer in Quantum Literacy for Workforce award by the National HUBZone Council and the 2014 National Minority Research Mentorship Award and Honor. He holds a patent for the P-VEST (Pulmonary Vest for Electro-Sonic Treatment) for Cystic Fibrosis and a provisional utility patent for RAPID PODS (Rapid Assembled PODS for Immediate Deployment – Prevention On-Demand Screening) for rapid clinical assessments.

Michael V. Drake, MD, is the 21st president of UC's world-renowned system of 10 campuses, five medical centers, three nationally affiliated labs, more than 280,000 students and 230,000 faculty and staff.

Dr. Drake previously served as president of The Ohio State University (OSU) from 2014 through June 2020. Prior to his six years at OSU, his entire academic career has been at UC, including as chancellor of UC Irvine for nine years from 2005 to 2014 and as the systemwide vice president for health affairs from 2000 to 2005.

Drake received his AB from Stanford University and his residency, MD, and fellowship in ophthalmology from UCSF. He subsequently spent more than two decades on the faculty of the UCSF School of Medicine, including as the Steven P. Shearing Professor of Ophthalmology.

Drake's extensive public service experience includes various roles for the American Medical Association, the National Eye Institute, the Association of American Medical Colleges, and multiple commissions on health in the state of California. He is a former chair of the board of directors of the Association of American Universities and currently serves as a member of the board of directors for the Association of Public and Land-grant Universities. He is also the chair of the board of governors of the National Collegiate Athletic Association, a member of the American Talent Initiative Steering Committee, and a member of the board of directors of the Rock and Roll Hall of Fame.

Session 6

Gregory Weiss, PhD, is a tenured Professor and Vice Chair of Chemistry has 23 years of experience running a laboratory at UCI, where he teaches a course on “The Craft of Science” to new graduate and undergraduate students. Co-founder of four biotechnology and technology companies (including PhageTech and Debut Biotechnology), he was named UCI’s Entrepreneurial Leader of the Year in 2018 and a Faculty Innovation Fellow in 2019. He is an AAAS Fellow and has received an award from UCI’s School of Biological Sciences for mentoring junior faculty. His postdoctoral training took place at Genentech, which illustrates his interest in both academic and industrial research laboratories. He was selected by the US NAS as a representative to the “Annual Meeting of New Champions,” World Economic Forum meetings in Dalian and Tianjin, China, and also served on a committee examining dual-use issues for a joint US NAS / AAAS committee (“Responsible Bioscience for a Safe and Secure Society,” 2010-2011).

Jason Borenstein, PhD, is a program director within the U.S. National Science Foundation’s Directorate for Social, Behavioral and Economic Sciences (SBE). His primary responsibility is being part of the team that oversees the Ethical and Responsible Research (ER2) program at NSF. The ER2 program involves a partnership across the agency’s eight Directorates and its Office of International Science and Engineering.

Dr. Borenstein has extensive experience serving in both faculty and administrative roles in academia. He has a range of scholarly publications, and has served in various roles for professional organizations and journals. His research interests include robot and artificial intelligence ethics, engineering ethics, research ethics, and bioethics.

Geeta Swamy, MD, is Professor of Obstetrics and Gynecology in the Division of Maternal-Fetal Medicine, having served as the director of the Duke Perinatal Research Center and Vice Chair for Research and Faculty Development in the Department of ObGyn. She has achieved international acclaim as a clinician researcher and expert in the field of maternal immunization and perinatal infection. As a consultant to the World Health Organization, Dr. Swamy contributes her knowledge to advance international work to evaluate the immunogenicity, safety, and efficacy of vaccines in pregnant women. The American College of ObGyn has grown to be the “collective voice” for women’s health, and Dr. Swamy has been a leader within that organization for the last two decades. She currently serves as the Co-Principal Investigator for the NIH-NIAID Vaccine Treatment and Evaluation (VTEU) and CDC Clinical Immunization Safety Assessment. In addition, she has been a leader at Duke and nationally in promoting a culture of scientific integrity and transparency in research. She has been instrumental in developing and leading the School of Medicine’s research initiatives in administration, regulatory oversight, and compliance. In 2018, she became Vice Dean for Scientific Integrity in the School of Medicine and Associate Vice President for Research for Duke University. In these roles she oversees the Duke Office of Scientific Integrity (DOSI) which houses the Advancing Scientific Integrity, Services, & Training (ASIST) initiative, conflict of interest, clinical quality management, incident response in research, and research misconduct. She also oversees the Duke Office of Research Initiatives, the Duke Health IRB, Office of Research Administration (ORA), and Office of Research Contracts (ORC).

Sheila Garrity, JD, MPH, MBA is the Director for the Office of Research Integrity.

Before coming to ORI, Ms. Garrity served as Associate Vice President of Research Integrity at George Washington University (GW) from 2014 to 2023 where she oversaw operations of the Office of Laboratory and Radiation Safety, Office of Human Research, Office of Animal Research, Office of Research Integrity and Regulatory Affairs and served as the institutional Research Integrity Officer (RIO). At GW Garrity was responsible for policy development, informational sessions, and development of educational modules to assist investigators with understanding their ethical and fiduciary responsibilities regarding their research.

Prior to that, Ms. Garrity spent more than 20 years at Johns Hopkins University School of Medicine where she served as the director of the Division of Research Integrity and Research Integrity Officer (RIO). She is a founding member and first president of the Association for Research Integrity Officers (ARIO, founded 2013). Ms. Garrity was in the first group of teaching RIOs when ORI launched its first series of RIO Bootcamps in the early 2000's.

Ms. Garrity earned her JD from the University of Maryland School of Law and her MBA and MPH at Johns Hopkins where she also received a certificate in Health and Human Rights.

Lex Bouter, PhD, obtained a MSc degree in Medical Biology at Utrecht University and joined Maastricht University in 1984, where he was trained as an epidemiologist and obtained his PhD. In 1988 he published a textbook on epidemiology, the seventh revised Dutch edition of which appeared in 2016 and the first English edition in 2018. In 1992, he took up a tenured position as Professor of Epidemiology in Amsterdam. From 2006 until 2013 he was Rector Magnificus of his university. Subsequently, Professor Bouter prepared for a return to science during a sabbatical leave. In 2014 his tenured professorship was broadened to Methodology and Integrity. He is currently involved in teaching and research regarding responsible conduct of research, questionable research practices and research misconduct. In 2017, Professor Bouter organized and Co-chaired the 5th World Conference on Research Integrity in Amsterdam, the 6th World Conference on Research Integrity in Hong Kong in 2019, the 7th World Conference on Research Integrity in Cape Town in 2022, and is chair of the World Conferences on Research Integrity Foundation.