



Senior Research Officers Meeting

March 11-13, 2018

Surf and Sand Resort

1555 S. Coast Highway, Laguna Beach, CA 92651

SPEAKER BIOGRAPHIES

Lizbet Boroughs

Associate Vice President for Federal Relations

Association of American Universities

Lizbet Boroughs has served at AAU since April 2015. As the Associate Vice President for Federal Relations, she has primary responsibilities for funding and policy issues related to the National Institutes of Health and USDA's Agriculture and Food Research Initiative. She is also responsible for immigration and visa policy. She has primary responsibility for issues related to biomedical and health policy and regulatory issues, including biomedical research costs and compliance.

Prior to joining, AAU, Lizbet was Deputy Director of Government Relations at the American Psychiatric Association for fifteen years and was active in passage of federal programs for suicide prevention and increases in federal investment in neurological research. While at APA, she co-chaired the Mental Health Liaison Group, a coalition comprised of over 60 national organizations advocating for improved mental health and addiction services.

Lizbet received a Master of Science degree in Public Health at UNC-Chapel Hill with a concentration in pharmacoconomics and her undergrad degree in Political Science from Trinity College in Hartford, Connecticut.

Sandra A. Brown

Vice Chancellor for Research

University of California, San Diego

Sandra Ann Brown, Distinguished Professor of Psychology and Psychiatry, and Vice Chancellor for Research at UC San Diego. She oversees the Office of Research Affairs, which is charged with creating opportunities, enhancing the research experience, developing tools and training to improve research administration, and supporting and promoting university innovations.

She oversees the Office of Innovation and Commercialization, Animal Care and Animal Welfare, Contracts and Grants, Research Ethics, Government Research Relations, University-Industry Relations, Conflict of Interest, Postdoctoral and Visiting Scholars programs, and campus Organized Research Units.

Under her leadership, UC San Diego has achieved multi-year, billion-dollar investments in research and the university's top-five ranking as one of the nation's premier public research universities. She designed and implemented major transformations of research structures and processes to enhance the university's competitiveness.

She launched the Office of Innovation and Commercialization to accelerate UC San Diego related start-up companies that have now doubled, and improved training to help prepare trainees for future research careers. She serves on the Board of Directors of Biocom, CONNECT and CleanTech San Diego, and chair-elect of the Association of Public and Land-Grant Universities (APLU) Council on Research.

Dr. Brown is a Distinguished Professor in two UC San Diego departments: Psychology and Psychiatry. Her pioneering studies of youth addiction and adolescent development have led to 26 federally funded grants including the current National Consortium on Alcohol and Neurodevelopment in Adolescence (NCANDA) and Adolescent Brain Cognitive Development (ABCD), which is the largest longitudinal study of youth development ever funded by NIH. In addition to over 300 peer reviewed publications and one book (Adolescent Substance Abuse, Oxford Press), she previously directed the development of clinical, education and research activities as the Chief of Psychology at the Veterans Affairs Health Services System in San Diego.

She earned her Ph.D. in clinical psychology at Wayne State University in 1981, and is licensed as a psychologist by the California Board of Psychology.

David O. Conover
Vice President for Research and Innovation
University of Oregon

David O. Conover is the Vice President for Research and Innovation at the University of Oregon (UO). He directs the office of research and innovation and oversees the university's entire research enterprise. He is committed to enhancing research excellence and strengthening the role of research, scholarship and creative activity across the university. As the chief research officer, Conover oversees the majority of UO's multidisciplinary research centers and institutes, strategic research initiatives and partnerships, research infrastructure and administration, compliance and regulatory environment, innovation and commercialization efforts. He collaborates with deans, faculty, and colleagues in areas that support the research mission of the university and works with the UO donor community to support research initiatives.

Martha Crago
Vice-Principal, Research and Innovation
McGill University

Professor Crago is McGill University's Vice-Principal (Research and Innovation). Prior to returning to McGill, Professor Crago was the Vice-President (Research) and Professor in Human Communications Disorders at Dalhousie University. Her previous university administrative positions include Vice-President of International and Inter-Governmental Relations at the Université de Montreal as well as the Dean of Graduate and Postdoctoral Studies and Associate Provost (Academic Programs), at McGill University.

Professor Crago is the Chair of the Research Committee of the U15 group of Canada's research-intensive universities and a member of the SSHRC Governing Council. In 2016, she was selected by the Minister of Science of Canada to be a member of an Advisory Panel on the Funding of Fundamental Research. That same year, she was an expert advisor for the National Research Council of Canada's strategic planning exercise.

In 2014, she was appointed to the One Nova Scotia Coalition, the purpose of which was to propose an economic action plan for the province. Professor Crago has been a member of the Boards of a number of major Canadian science initiatives. She is also a member of the Research Partnership Committee of the Natural Sciences and Engineering Research Council (NSERC). Previously, she served as President of the Canadian Association for Graduate Studies and as a member of the University Advisory Group of Industry Canada.

Prof. Crago was appointed a Member of the Order of Canada in 2017. She was named Femme de Mérite de Montréal in 2000, Chevalier de l'Ordre des palmes académiques by the French government in 2009, and Woman of Excellence in Nova Scotia in 2015. She is also the recipient of a McGill University Prize for her contributions to research. Her research on language acquisition across a variety of languages and learners has been published extensively in scientific journals and books, and she was the Editor of Applied Psycholinguistics, a journal published by Cambridge University Press, from 2002 to 2018.

Tony DeCrappeo
President
Council on Governmental Relations

Mr. DeCrappeo is currently President of the Council on Governmental Relations (COGR). Prior to being appointed President in 2005, Mr. DeCrappeo was Vice President for Business Operations and Director, Cost Studies and Policy at COGR, providing staff support to the COGR Board and Committees with particular attention to research costing, financial and audit issues. In addition, Mr. DeCrappeo worked with special COGR Working Groups on the impacts on research from new policies and regulations on Export Controls, Biosecurity, and Select Agents. When first engaged with COGR in 1995, Mr. DeCrappeo staffed the Research Compliance

and Administration Committee, dealing with pre-and post-award policies and regulatory issues including Animal Welfare, Human Subjects in Research, and Conflicts of Interest.

Prior to his career with COGR, Mr. DeCrappeo worked at New Mexico State University and the Pennsylvania State University in those universities' Sponsored Programs Office as Director and Deputy Director, respectively. His first professional work was with the U.S. General Accounting Office (now the Government Accountability Office) from 1974 to 1981, including a two year assignment working for the House Oversight and Investigations Subcommittee.

Mr. DeCrappeo is a 1974 graduate of the Pennsylvania State University, with a Bachelor of Science degree in Accounting and Finance.

Dr. Joan Ferrini-Mundy
Chief Operating Officer
National Science Foundation

Dr. Joan Ferrini-Mundy is the chief operating officer of the National Science Foundation (NSF). From 2011 to 2016, she served as the assistant director for the Education and Human Resources (EHR) Directorate. She joined NSF as the inaugural division director for the Division of Research on Learning in Formal and Informal Settings in EHR. Currently, Ferrini-Mundy is co-chair of the Mathematics National Science and Technology Council's Federal Coordination in Science, Technology, Engineering and Mathematics Education Task Force.

Ferrini-Mundy served as an *ex officio* member of President Bush's National Mathematics Advisory Panel and co-chaired its Instructional Practices Task Group (2007 to 2008). She was a member of the Mathematics Expert Group for the 2012 Programme for International Student Assessment (PISA). She was elected a fellow of the American Association for the Advancement of Science (2011) and a member of the executive committee of the Association of Women in Mathematics (2013 to 2016). In 2016, she received a Presidential Rank Award for Distinguished Senior Executive Service and became a fellow of the American Mathematical Society (2017).

Before joining NSF, Ferrini-Mundy was a University Distinguished Professor of Mathematics Education at Michigan State University. She began her career as a high school mathematics teacher. Ferrini-Mundy holds a Ph.D. in mathematics education from the Department of Mathematics at the University of New Hampshire. Her research interests include calculus learning, mathematics teacher knowledge and K-12 science, technology, engineering and mathematics education policy.

Terri Fiez
Vice Chancellor for Research and Innovation
University of Colorado Boulder

Vice Chancellor for Research & Innovation Terri Fiez joined CU Boulder on September 16, 2015. As Vice Chancellor for Research, Dr. Fiez has leadership responsibility for the campus research enterprise.

Before joining CU Boulder, Dr. Fiez spent more than fifteen years at Oregon State University (OSU) where she was the head of the Department of Electrical and Computer Engineering, the Research Agenda Strategy Consultant to the Vice President for Research and head of the School of Electrical Engineering and Computer Science (EECS). In 2008-09 she took a leave of absence from OSU to co-found, launch and serve as CEO of a startup company and since then has helped support several other early stage startup companies.

After OSU's departments of Computer Science and Electrical and Computer Engineering merged to become the School of EECS in 2003, her leadership resulted in rapid growth in research and the PhD program by promoting collaboration across disciplines and growing nationally recognized research groups. The research expenditures and PhD program tripled in size during this period.

A former National Science Foundation Young Investigator awardee with over 150 publications, Dr. Fiez's scholarly interests focus on analog and mixed-signal integrated circuits and approaches to innovative education. The industry relations program she created at OSU hosts more than 400 industry visitors per year and is highlighted by an engineering expo featuring engineering seniors demonstrating their capstone projects to more than 2,500 industry and community visitors. She is a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), has been a distinguished lecturer for the IEEE Circuits and Systems Society and the Solid-State Circuits Society. She received the 2006 IEEE Educational Activities Board's Innovative Education Award and the 2016 IEEE Undergraduate Teaching Award for the creation of the nation's first online post baccalaureate computer science program.

Dr. Fiez earned bachelor's and master's degrees in electrical engineering from the University of Idaho and a PhD in electrical and computer engineering from OSU. She and her husband, Tim, have two sons.

Vivek Goel

Vice President, Research and Innovation University of Toronto

Professor Vivek Goel is Vice President, Research and Innovation at the University of Toronto and a Professor in the Institute of Health Policy, Management and Evaluation at the Dalla Lana School of Public Health. Professor Goel is a distinguished scholar with an extensive background in teaching, research and university administration. He obtained his medical degree from McGill University and completed post-graduate medical training in Community Medicine at the University of Toronto. Dr. Goel obtained an MSc in Community Health from U of T and an MS in Biostatistics from Harvard University School of Public Health. His research has focused on health services evaluation and the promotion of the use of research evidence in health decision-making.

Professor Goel joined the University of Toronto in 1991 as Assistant Professor in the Department of Preventive Medicine and Biostatistics. He was chair of the Department of Health Administration in the Faculty of Medicine from 1999 until 2001, then served as Vice-Provost, Faculty and subsequently was the University's Vice President and Provost from 2004 until 2008. He was a founding scientist at the Institute for Clinical Evaluative Sciences (ICES), where he continues as an Adjunct Senior Scientist. He served as founding President and CEO of Public Health Ontario from 2008 until 2014, where he was highly successful in building an

academic public health services agency that provided scientific and technical advice to front-line practitioners. Prior to rejoining U of T he served as Chief Academic Strategist with Coursera, a global platform that connects universities and learners with online courses.

He has extensive experience in governance and in his University role serves on the boards of MaRS Innovation, the Vector Institute, the Centre for Commercialization of Regenerative Medicine, the Centre for Commercialization of Antibodies and Biologics, Compute Ontario, TRIUMF, IC-IMPACTS and is co-chair of the Southern Ontario Smart Computing Innovation Platform (SOSCIP). He is also the Chair of the Toronto Central Local Health Integration Network board and Vice-Chair of the Canadian Institute for Health Information.

Edward J. Hackett

Vice Provost for Research

Brandies University

Edward J. Hackett is vice provost for research and a professor in the Heller School for Social Policy and Management. He is responsible for the Office of Research Administration, the Office of Technology Licensing, the Foster Lab (which cares for animal subjects used in research), and Sponsored Program Accounting. From 1997-2015, he was a professor in Arizona State University's School of Human Evolution and Social Change, with appointments in the School of Sustainability, School of Life Sciences, and Consortium for Science Policy & Outcomes. He was a founding member of the Department of Science and Technology Studies at Rensselaer Polytechnic Institute (1984-98). As a rotator, he directed the NSF Division of Social and Economic Sciences (2006-08), and the Science and Technology Studies program (1996-98). His research, supported by various NSF grants, has mainly focused on the social organization and dynamics of science, peer review and environmental justice. He has published in American Sociological Review, Minerva, Research Policy, Social Studies of Science, Science, Technology & Human Values, and other journals. He was lead editor of the "Handbook of Science and Technology Studies" (MIT Press, 2008), and has been editor of Science, Technology & Human Values since 2012. Ed holds a BA from Colgate University, and an MA and PhD from Cornell University, all in sociology.

Randolph Hall

Vice President for Research

University of Southern California

Hall leads research across the university, overseeing research advancement, administration and ethics. Hall's experience includes serving as the founder/principal investigator for two national research centers, the Center for Risk and Economic Analysis of Terrorism Events (CREATE), and the National Center for Metropolitan Transportation Research (METRANS). He also served as senior associate dean for research in the Viterbi School of Engineering for four years. Hall was chair of Industrial and Systems Engineering during a period when the faculty size grew by 50%, and when it became the first named academic department at the University of Southern California, upon receipt of a \$10 million gift from Daniel J. Epstein, creating the first named department at USC.

As Vice President, Hall has led the creation of policies to catalyze collaborative research, including changes in promotions and tenure, research attribution, and shared repositories; creation of funding programs that

support collaborative research and shared equipment; and infrastructure and events enabling digital scholarship, as well as standards for research transparency and reproducibility. He has helped faculty create national research centers, built alliances with external research institutes, developed the Center for Excellence in Research, created the DC-based research advancement office, and built an integrated research office that encompasses contracts and grants, technology transfer, human subject protection, animal resources, research ethics, research training, research advancement and internal grant programs. Hall is the architect for the TARA research administration system at USC, providing software tools that support research administration, compliance, technology transfer and business intelligence.

In addition to serving as Vice President, Hall is Professor in the Epstein Department of Industrial and Systems Engineering. In this capacity, Hall is the author of *Queueing Methods for Services and Manufacturing* (Prentice Hall, 1997) and the editor of *Handbook of Transportation Science* (Springer, 1999, 2003), *Handbook of Healthcare System Scheduling* (Springer, 2012) and *Patient Flow: Reducing Delay in Healthcare Delivery* (Springer, 2006, 2013). He is also a board member for the USC Health System and the AMI Institute at USC, and President of ICT Productions, a USC subsidiary. Hall is chairman of the University Industry Demonstration Partnership, the national leader in developing standards for industry funded research in universities, and represents USC within the Association of Academic Health Centers as well as the Association of American Universities Senior Research Officer group.

Dr. Hall has been funded by the National Science Foundation, U.S. Departments of Homeland Security and Transportation, California Department of Transportation, Los Angeles County Department of Health Services and L.A. Care. Dr. Hall has numerous publications in the areas of transportation, logistics, system engineering, and queueing, including pioneering work on the use of dynamic information in path finding for transportation. Hall received his Ph.D. (1982) and M.S. (1980) in civil engineering from U.C. Berkeley. He received his B.S. in industrial engineering and operations research from U.C. Berkeley in 1979.

Dan Kahan

**Elizabeth K. Dollard Professor of Law and Professor of Psychology
Yale Law School**

Dan Kahan is the Elizabeth K. Dollard Professor of Law and Professor of Psychology at Yale Law School. He is a member of the Cultural Cognition Project, an interdisciplinary team of scholars who use empirical methods to examine the impact of group values on perceptions of risk and science communication. In studies funded by the National Science Foundation, Professor Kahan and his collaborators have investigated public dissensus over climate change, public reactions to emerging technologies, and public understandings of scientific consensus across disputed issues. Articles featuring the Project's studies have appeared in a variety of peer-reviewed scholarly journals including the *Journal of Risk Research*, *Judgment and Decision Making*, *Nature Climate Change*, *Science*, and *Nature*. The Project's current focus is on a field research to integrate insights from the science of science communication into the craft of professional science communicators in various domains, including democratic decision making, education, and popular engagement with science.

Pramod P. Khargonekar
Vice Chancellor for Research
University of California, Irvine

Khargonekar received B. Tech. Degree in electrical engineering from the Indian Institute of Technology, Bombay, India, in 1977, and M.S. degree in mathematics and Ph.D. degree in electrical engineering from the University of Florida in 1980 and 1981, respectively. He has held faculty positions at the University of Florida, University of Minnesota, and The University of Michigan. He was Chairman of the Department of Electrical Engineering and Computer Science from 1997 to 2001 and also held the position of Claude E. Shannon Professor of Engineering Science at The University of Michigan. From 2001 to 2009, he was Dean of the College of Engineering and is currently Eckis Professor of Electrical and Computer Engineering at the University of Florida. He also served briefly as Deputy Director of Technology at ARPA-E, U. S. Department of Energy in 2012-13. He was appointed by the National Science Foundation (NSF) to serve as Assistant Director for the Directorate of Engineering (ENG) in March 2013, a position he held till June 2016. In this position, Khargonekar led the ENG Directorate with an annual budget of more than \$910 million. In addition, he served as a member of the NSF senior leadership and management team and participates in setting priorities and policies. In June 2016, he assumed his current position as Vice Chancellor for Research at the University of California, Irvine.

Khargonekar's research and teaching interests are centered on theory and applications of systems and control. His early work was on mathematical control theory, specifically focusing on robust control analysis and design. During the 1990's, he was involved in a major multidisciplinary project on applications of control and estimation techniques to semiconductor manufacturing. His current research and teaching interests include systems and control theory, machine learning, and applications to smart electric grid and neural engineering. He has authored more than 150 refereed journal publications and 180 conference publications. He has supervised 36 doctoral students. He has been recognized as a Web of Science *Highly Cited Researcher*. He is a recipient of the NSF Presidential Young Investigator Award, the American Automatic Control Council's Donald Eckman Award, the Japan Society for Promotion of Science fellowships, the IEEE W. R. G. Baker Prize Award, the IEEE CSS George Axelby Best Paper Award, the Hugo Schuck ACC Best Paper Award, and the Distinguished Alumnus and Distinguished Service Awards from the Indian Institute of Technology, Bombay. He is a Fellow of IEEE and IFAC. At the University of Michigan, he received the Arthur F. Thurnau Professorship. In the past, he has served as Associate Editor for IEEE Transactions on Automatic Control, SIAM Journal of Control, Systems and Control Letters, and International J. of Robust and Nonlinear Control. He has been a member of the IEEE Control Systems Theory and Robust Control technical committee. He has also served as Chair and Member of the American Automatic Control Council's Donald Eckman Award Committee. He has served as Program Co-Chair of the American Control Conference. Recently, he was a member of the IEEE Smart Grid 2030 Vision committee.

Professor Kahan is a Senior Fellow at the National Center for Science and Civic Engagement and a member of the American Academy of Arts and Sciences.

Arthur “Skip” Lupia
Hal R. Varian Professor of Political Science
University of Michigan

Arthur Lupia the Hal R. Varian Professor of Political Science at the University of Michigan and research professor at its Institute for Social Research. He examines how people learn about politics and works many organizations to improve strategic communication and delivery of critical services. His books include *Uninformed: Why Citizens Know So Little About Politics and What We Can Do About It*.

He has been a Guggenheim fellow, a Carnegie Fellow, is an American Association for the Advancement of Science fellow and is an elected member of the American Academy of Arts and Sciences. His awards include the National Academy of Sciences Award for Initiatives in Research and the American Association for Public Opinion’s Warren Mitofsky Innovators Award. He serves as Chair of the National Academy of Sciences Roundtable on the Application of the Social and Behavioral Science, and Chairman of the Board of the Board of Directors for the Center for Open Science. He serves on many scientific advisory boards including DBASSE at the NASEM and the Social and Behavioral Sciences directorate at NSF.

Sarah Nusser
Vice President for Research
Iowa State University

Sarah Nusser is vice president for research at Iowa State University, leading efforts to develop transformative interdisciplinary research and support the broader research mission at Iowa State. She is professor of statistics and former director of the Center for Survey Statistics and Methodology, where she led research and development for a national agro-environmental survey for the U.S. Department of Agriculture, pursued research in geospatial data collection for land-based surveys, and developed statistical models for surveys aimed at assessing dietary intake and physical activity. Nusser is fellow of the American Statistical Association and elected member of the International Statistical Institute, and has served on numerous scientific panels, advisory committees and governing boards with the National Academies, National Science Foundation, National Institutes of Health, U.S. Census Bureau, U.N. Food and Agriculture Organization, and national and international statistical societies.

Matt Owens
Vice President for Federal Relations and Administration
Association of American Universities

Matt Owens has served at AAU since April 2002. As Vice President for Federal Relations and Administration, he oversees the AAU’s federal relations activities, as well as the Association’s office operations and finances. He staffs the AAU Board of Directors, the Audit and Finance Committee, and the Membership Committee. He has primary responsibility for overall federal budget and appropriations advocacy and shares responsibility for

other issues related to research and higher education. Mr. Owens also worked for the Association from 1994-1997.

From 1999-2002, Mr. Owens served as the Assistant Director of Government and Community Relations at Stanford University, where he worked on federal research policy and funding issues, as well as university land use policies and local governmental relations.

Mr. Owens earned a Master of Public Administration (MPA) from the University of North Carolina at Chapel Hill, a Bachelor of Arts in English from the University of California at Davis, and an Associate of Arts in English from Santa Rosa Junior College.

Jennifer Poulakidas

Vice President for Congressional and Governmental Affairs Association of Public and Land-grant Universities

Jennifer Poulakidas joined the Association of Public and Land-grant Universities in 2006 as vice president for Congressional and Governmental Affairs. In this role, she works closely with the leadership of APLU's 230+ member universities to promote public higher education's positions to Congress and the Executive Branch on science and research, student affordability and access, innovation and competitiveness, and internationalization, among other issues of importance to major public universities.

Before APLU, Jennifer was legislative director for science at the University of California's Washington, DC office. During her 11 years with UC, she enjoyed active engagement with the federal science and research advocacy community. She continues her close work with various coalitions, such as the Ad Hoc Group for Medical Research, United for Medical Research, the Task Force for American Innovation, the Coalition for National Science Funding, and The Science Coalition.

A San Francisco native, her career in Washington began on Capitol Hill where she served her hometown as an aide to Congresswoman Nancy Pelosi. Jennifer received a B.A. in Sociology from UCLA and an MPAff from the University of Texas at Austin's LBJ School of Public Affairs.

Padma Raghavan

Vice Provost for Research Vanderbilt University

Padma Raghavan is a Professor of Computer Science in the Department of Electrical Engineering and Computer Science at Vanderbilt University, where she is also Vice Provost for Research. Prior to joining Vanderbilt in February 2016, she was a Distinguished Professor of Computer Science and Engineering at the Pennsylvania State University and served as the Associate Vice President for Research and Director of Strategic Initiatives, in addition to being the founding Director of the Institute for CyberScience, the coordinating unit on campus for developing interdisciplinary computation and data-enabled science and engineering and the provider of high-performance computing services for the university.

Raghavan received her Ph.D. in computer science from Penn State. Prior to joining Penn State in August 2000, she served as an associate professor in the Department of Computer Science at the University of Tennessee and as a research scientist at the Oak Ridge National Laboratory.

Raghavan specializes in high-performance computing and computational science and engineering. She has led the development of “sparse algorithms” that derive from and operate on compact yet accurate representation of high dimensional data, complex models, and computed results. Raghavan has developed parallel sparse linear solvers that limit the growth of computational costs and utilize the concurrent computing capability of advanced hardware to enable the solution of complex large-scale modeling and simulation problems that are otherwise beyond reach. Raghavan was also among the first to propose the design of energy-efficient supercomputing systems by combining results from sparse scientific computing with energy-aware hardware optimizations used for small-embedded computers. In her professorial role, Raghavan is deeply involved in education and research, with 46 Masters and Ph.D. theses supervised and approximately 100 peer-reviewed publications. She has earned several awards including an NSF CAREER Award (1995), the Maria Goeppert-Mayer Distinguished Scholar Award (2002, University of Chicago and the Argonne National Laboratory), and selection as an IEEE Fellow (2013).

Raghavan is a prominent member of major professional societies including SIAM (Society of Industrial and Applied Mathematics) and IEEE (Institute of Electrical and Electronics Engineers). She is the Chair of the Technical Program of the 2017 IEEE/ACM Conference on Supercomputing and serves on the editorial boards of SIAM series on Computational Science and Engineering, and Software, Environments and Tools. Raghavan is also a member of the SIAM Committee on Science Policy and the SIAM Council, which together with its Board and officers leads SIAM. Raghavan serves on the Advisory Board of the Computing and Information Science and Engineering Directorate of the National Science Foundation and the National Academies Panel on Computational Sciences at the Army Research Laboratory.

Peter Schiffer, Ph.D.

**Vice Provost for Research and Professor of Applied Physics and Physics
Yale University**

Dr. Schiffer graduated from Yale College in 1988. After receiving his Ph.D. in physics from Stanford University in 1993, he undertook postdoctoral work at AT&T Bell Laboratories. He was on the physics faculty first at the University of Notre Dame and then at Pennsylvania State University. At Penn State, he served a five-year term as associate vice president for research and director of strategic initiatives. He then moved to the University of Illinois at Urbana-Champaign, where he was professor of physics and vice chancellor for research from 2012-2017. In this role, he had responsibility for the facilitation and administration of research activities across the university. In his role as the inaugural Vice Provost for Research, Dr. Schiffer works to support and enhance research at Yale in all schools and departments, providing broad oversight and attention to the people, services, facilities, and other resources that comprise Yale’s research enterprise.

Dr. Schiffer’s personal research is in experimental condensed matter physics, and has focused on frustrated magnets, magnetoelectronic materials, and the physics of granular materials. He has published extensively, co-authoring more than 200 papers and amassing over 10,000 total citations of his work.

He is a fellow of the American Physical Society and the recipient of numerous academic honors including an Alfred P. Sloan Research Fellowship, a Presidential Early Career Award from the Army Research Office, and a National Science Foundation Early Career Development Award.

Amy Scott

Associate Vice President for Federal Relations

Association of American Universities

Amy Scott has served at AAU since May 2005. As the Associate Vice President for Federal Relations, she has primary responsibilities for funding and policy issues related to the National Science Foundation and NASA and SBIR issues. She shares responsibility for export control and other regulatory and compliance issues. She co-leads the Coalition for National Science Foundation (CNSF) and staffs the AAU Internationalization Issues Forum.

Prior to joining AAU, Amy served as Director of Policy and Legislation for The Council of State Governments – a national organization that represents elected and appointed officials from all three branches of state government. Amy began her career in government in the Office of United States Senator Paul S. Sarbanes, where she served as a Legislative Assistant for five years.

Amy is a graduate of the University of Baltimore Law School and Loyola University in Maryland.

Tobin Smith

Vice President for Policy

Association of American Universities

Tobin (Toby) Smith is Vice President for Policy at the Association of American Universities (AAU), an organization of 60 leading U.S. and two Canadian research universities devoted to maintaining a strong system of academic research and education.

Toby oversees and coordinates AAU's policy and policy analysis activities. Among his specific areas of responsibility are issues relating to science and innovation policy; academic research; regulation, compliance and research costs; technology transfer; and openness and security. Toby also oversees AAU's Undergraduate STEM Education Initiative.

Prior to joining AAU in January 2003, Toby worked as a federal relations representative in the Washington D.C. Offices of the University of Michigan (1999-2002) and the Massachusetts Institute of Technology (1992-1999). Toby began his Washington career on Capitol Hill as a legislative assistant to Congressman Bob Traxler (D-Michigan).

Toby has written and spoken widely on science policy and science funding issues. He is the co-author a book on national science policy published in 2008 by the University of Michigan Press titled, *Beyond Sputnik – U.S.*

Science Policy in the 21st Century. He is currently a member of the National Academy of Sciences Roundtable on the Communication and Use of Social and Behavioral Sciences and sits on advisory boards to the National Alliance for Broader Impacts (NABI) and the International Network for Assessment and Evaluation of the Societal Impacts of Science (AESIS). Toby is also a fellow of the American Association for the Advancement of Science.

He holds a Masters Degree in Arts of Legislative Affairs from George Washington University, and a Bachelor Degree in General Studies from the University of Michigan.

Gloria Waters, PhD

**Vice President and Associate Provost for Research
Boston University**

Gloria Waters is Boston University's Vice President and Associate Provost for Research. In this role she is responsible for overseeing the University's \$400 million research enterprise. She oversees research compliance, helps shape policy, advances administrative initiatives and plays a leadership role in strategic planning for research and the development of new research facilities. In addition, she oversees the Office of Technology Development, which facilitates the transfer of university discoveries to the public sector, as well as the research activities of over a dozen university-wide interdisciplinary research centers. From 2005 to 2013, Dr. Waters was dean of BU's College of Health & Rehabilitation Sciences: Sargent College. There, she led dramatic increases in the size, quality, and selectivity of the College's undergraduate and graduate programs, enhanced student and faculty support, and doubled the volume of its research funding.

Dr. Waters has been a Professor of Speech, Language & Hearing Sciences at Boston University since 1997. Prior to that she was a faculty member at McGill University for 15 years. Dr. Waters' research is in the areas of language and memory processes, including a sizable portfolio of federal and foundation-sponsored awards from the US Department of Education, the National Institutes of Health, the Medical Research Council of Canada, the Natural Science and Engineering Council of Canada and the Alzheimer's Association of America, among others. Her research focuses on the effects of aging and neuropathology on language comprehension, as well as on the use of neuroimaging techniques to localize language functions in the brain. In addition, she has carried out research on the acquisition of reading and spelling skills in children, reading ability in congenitally deaf children, and the role of short-term memory in language comprehension.

Denis Wirtz

**Vice Provost for Research
John Hopkins University**

Dr. Wirtz directs the Johns Hopkins Physical Sciences-Oncology Center and co-directs the Cancer Nanotechnology Training Center, both National Cancer Institute-funded entities. He is a co-founder and former associate director of the Johns Hopkins Institute for NanoBioTechnology.

Wirtz studies the biophysical properties of healthy and diseased cells, including interactions between adjacent cells and the role of cellular architecture on nuclear shape and gene expression. Cell biophysics, single

molecule manipulation, intracellular particle trafficking, instrument development, tissue engineering, and nanotechnology in biology and medicine are among his research interests. Wirtz was elected Fellow of the American Association for the Advancement of Science for his contributions to cell micromechanics and cell adhesion. AAAS also recognized Wirtz for his development and applications for particle tracking methods to probe the micromechanical properties of living cells in normal conditions and disease state. In addition, Wirtz is a fellow of the American Physical Society and the American Institute for Medical and Biological Engineering. He is a past recipient of the National Science Foundation's CAREER Award and the Whitaker Foundation Biomedical Engineering Foundation Award.

Wirtz has authored more than 200 peer-reviewed articles published in top journals including Science, Nature, Nature Cell Biology, Nature Methods, Nature Reviews Cancer, Nature Materials, Nature Protocols, PNAS, Nature Communications, and Journal of Cell Biology. Ten of his PhD students and postdoctoral fellows are in faculty positions at research universities. His work at Hopkins has been cited >15,000 times and has an h-index of 70. He has also given numerous presentations at universities and research institutions around the world.

Wirtz earned his bachelor's degree in Engineering Physics from the Université Libre de Bruxelles in Belgium and master's and doctoral degrees in Chemical Engineering from Stanford University.