2019 Engineering Deans
Public Policy Colloquium
Fairmont Hotel ● Washington, DC ● February 4-6, 2019
Speaker Biographies
ABOUT THE COLLOQUIUM

The Public Policy Colloquium of the ASEE Engineering Deans Council (EDC), which began in 1991, is organized by a Public Policy Committee, comprised of engineering deans – members of EDC.

The Colloquium has a dual role: to strengthen the discussion of engineering education and research issues between the deans of engineering and key public policy makers, and to enable the deans to refine their public policy agenda. Attendance is open only to deans of engineering and their federal/government relations representatives.

Jennifer T. Poulakidas

Jennifer T. Poulakidas joined APLU in 2006 as Vice President for Congressional and Governmental Affairs. In this role, she works closely with the leadership of APLU’s more than 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, Poulakidas 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. 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.

Poulakidas’ extracurricular activities include serving on the national alumni boards for UCLA (2008-13) and the UT LBJ School (2013-present). She volunteers with the Metropolitan Washington Ear, a reading service for blind and print-handicapped persons. Other activities include the California State Society Board, volunteering for Martha’s Table, and serving on her condominium board as well as the sport and fitness committee for the DC Jewish Community Center. She is also engaged with the Greek-American and Greek Orthodox communities and enjoys traveling internationally as well as around the U.S. and especially appreciates visiting our universities!

Dr. Kelvin K. Droegemeier: Invited

Dr. Kelvin K. Droegemeier is Director of the White House Office of Science and Technology Policy (OSTP). While at OSTP, he is on leave from the University of Oklahoma where he is Regents’ Professor of Meteorology, Weathernews Chair Emeritus in Applied Meteorology, and Roger and Sherry Teigen Presidential Professor. From 2009 to 2018, he also served as Vice President for Research. Dr. Droegemeier joined the University of Oklahoma faculty in 1985. In 1989, he co-founded the NSF Science and Technology Center for the Analysis and Prediction of Storms and directed it from 1994-2006. In 2003, he co-founded the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere and served as Deputy Director. He also launched and directed the Sasaki Institute, which is a non-profit organization at the University of Oklahoma that fosters the development and application of knowledge, policy, and advanced technology for the mutual benefit of the government, academic, and private sectors. He has also served as Chairman of the Board of Trustees at the University Corporation for Atmospheric Research. He served two terms on the National Science Board (NSB), starting in 2004, and was Vice-Chairman from 2012 to 2016. Dr. Droegemeier earned a B.S. from the University of Oklahoma in 1980, M.S from University of Illinois at Urbana-Champaign in 1982 and Ph.D. from University of Illinois at Urbana-Champaign in 1985.

Dr. Bruce Tromberg

In January 2019, Dr. Bruce Tromberg began as Director of the National Institute of Biomedical Imaging and Bioengineering (NIBIB) at the National Institutes of Health (NIH). He comes to NIH from his positions leading the Beckman Laser Institute and Medical Clinic (BLI) at the University of California, Irvine (UCI) and as principal investigator of the Laser Microbeam and Medical Program (LAMMP), an NIH P41 National Biomedical Technology Center in the BLI. Prior to leading the NIH National Institute of Biomedical Imaging and Bioengineering (NIBIB), he has been a Professor with joint appointments in the departments of Biomedical Engineering and Surgery, co-led the Onco-imaging and Biotechnology Program in UCI’s NCI Chao Family Comprehensive Cancer Center, and been a member of the UCI faculty since 1990. Dr. Tromberg’s research spans the interdisciplinary fields of Biophotonics and Biomedical Optics with particular emphasis on the development of new technologies for medical imaging and therapy. Dr. Tromberg has served on several national advisory committees, including the Experimental Imaging Sciences Committee for the American College of Radiology Imaging Networks (ACRIN) and is a former council member for the NIBIB. He has received several awards for his work, including the R&D 100 Award, the OE Magazine Technology Innovator Award, and the Michael S. Feld Biophotonics Award. He is a Fellow of the International Society for Optical Engineering (SPIE), the Optical Society of America (OSA), and the American Institute for Medical and Biological Engineers (AIMBE).

Miriam Quintal

Miriam Quintal boasts a decade of advocacy and client success at Lewis-Burke Associates, managing the federal relations portfolios for large academic institutions, scientific societies, and facility management organizations. Miriam fiercely protects client priorities, leveraging her unique combination of scientific training with political insight. Her wealth of knowledge and federal research enterprise acumen provides value to all components of client interests: supporting university leadership, shepherding research initiatives, and shaping policy across a range of issues. Recent advocacy efforts include successfully guiding large-scale science projects through the appropriations process, restoring funding for key programs proposed to be eliminated in the President’s budget request, establishing new agency funding for research infrastructure, and creating opportunities for clients to showcase research and leadership in Administration initiative areas. Miriam co-leads the firm’s National Science Foundation practice and works closely with the higher education and research advocacy community to champion the Foundation. Her issue expertise includes basic research (National Science Foundation, Department of Defense, Department of Energy Office of Science), STEM education, computing, computational science, math and physical sciences, engineering, space and astronomy. Miriam has an undergraduate degree in chemistry with highest honors from Smith College and a masters degree in organic chemistry from Harvard University. She has been a National Science Foundation Graduate Research Fellow and a Fulbright Fellow.
Otto Katt brings a passion for education to his advocacy in the areas of higher education, workforce, immigration, and tax policy on behalf of Lewis-Burke Associates clients. Otto provides strategic guidance on legislative, administrative, and regulatory issues at the Department of Education (DoED). He leverages his professional knowledge and expertise, gained while working in the K-12 space and at the state and federal policy level, to provide timely insight and support to clients on key education policy issues including federal student financial aid, the evolving higher education landscape, and tax and immigration policy as they relate to higher education.

Before joining Lewis-Burke, Otto served as the education advisor for Tennessee Representative Phil Roe, a member of the House Education and the Workforce Committee. While there, he proposed and developed education and workforce development policies for the congressman. He also staffed and advised the congressman at Education and Workforce Committee meetings and district events and engaged various interest groups, stakeholder groups, and agencies regarding pertinent legislation. His issue expertise includes: Higher education policy, student financial aid, free speech, campus safety, accreditation, STEM (Department of Education), workforce (Department of Labor), immigration (DHS; USCIS), tax. Otto has worked in education as a teacher, administrator, and policy analyst in New Jersey, Massachusetts, and North Carolina. These experiences include serving as a Teach For America Corps member.

Dr. Lynne E. Parker is Assistant Director for Artificial Intelligence (AI) at the White House Office of Science and Technology Policy (OSTP). In this role, she is the White House lead for AI policy, and engages with numerous stakeholders to accelerate advances in AI for economic growth, improved quality of life, and national and economic security. Prior to joining OSTP, she was Interim Dean of the Tickel College of Engineering at the University of Tennessee, Knoxville (UTK) and Professor in UTK’s Electrical Engineering and Computer Science Department. She previously served as the National Science Foundation’s Division Director for Information and Intelligent Systems, and was a co-chair of the U.S. government task force on AI that produced the 2016 “National Artificial Intelligence R&D Strategic Plan.” Prior to joining UTK, she worked as a Distinguished R&D Staff Member at Oak Ridge National Laboratory. She received her PhD in computer science from MIT and is a Fellow of AAAS and IEEE.

Susan Lund is a partner at McKinsey & Company and a leader of the McKinsey Global Institute. She is an expert on global labor markets, financial markets, and trade. Her latest research assesses how new technologies and shifts in demand are impacting global trade and value chains. Other recent research of hers has analyzed the effects of automation and artificial intelligence on the future of work and workforce skills; provided new evidence on the size and motivations of the gig economy in the United States and Europe; quantified the potential economic impact of digital finance and mobile money in developing countries; and assessed the continuing accumulation of global debt and potential risks. She has authored numerous articles in leading business publications and is on the Board of the National Association of Business Economics and on the Economic Advisory Board of the International Finance Corporation. She is currently serving on the World Economic Forum Global Future Councils on the New Social Contract and is a long-time member of the Council on Foreign Relations, Conference of Business Economists, and the Bretton Woods Committee. She holds a PhD from Stanford University and a BA from Northwestern University.

Tobin Smith (Toby) Smith is Vice President for Policy at the Association of American Universities (AAU), an organization of 62 leading U.S. and 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. 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 has written and spoken widely on science policy and funding issues. He is the co-author of a book on national science policy published in 2008 titled, Beyond Sputnik – U.S. Science Policy in the 21st Century. He 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.

Peter Harrell is an adjunct senior fellow at the Center for a New American Security, where he focuses on the intersection of economics and national security. Research interests include economic statecraft, sanctions and energy. From 2012-2014, Mr. Harrell served as the Deputy Assistant Secretary for Counter Threat Finance and Sanctions in the State Department’s Bureau of Economic and Business Affairs. In that role, Harrell was instrumental in developing the international sanctions against Iran, Russia, and Syria, and in the easing of sanctions on Myanmar. He also played a leading role in the U.S. government’s efforts to counter terrorist financing, including work to combat the financing of the Islamic State (ISIL). Mr. Harrell served on the State Department’s Policy Planning Staff from March 2009 to June 2012, where he played a leading role in developing Secretary of State Hillary Clinton’s economic statecraft agenda. He also worked on a variety of other trade and economic issues, with a particular interest in Asia, and authored and edited sections of the State Department’s first-ever Quadrennial Diplomacy and Development Review (QDDR).

Before joining the State Department, Mr. Harrell served on President Barack Obama’s 2008 campaign. He previously worked as a reporter for Congressional Quarterly in Washington, D.C., and is the author of one book, Rwanda’s Gamble: Gacaca and a New Model of Transitional Justice. Mr. Harrell is a magna cum laude graduate of Princeton University and holds a J.D. from the Yale Law School. He is originally from Atlanta, Georgia.
**Dr. Dawn Tilbury**

Since June 2017, Dr. Dawn M. Tilbury has served as the Assistant Director for Engineering at the National Science Foundation. She received a B.S. degree in Electrical Engineering, summa cum laude, from the University of Minnesota in 1989, and M.S. and Ph.D. degrees in Electrical Engineering and Computer Sciences from the University of California, Berkeley, in 1992 and 1994, respectively. In 1995, she joined the Mechanical Engineering Department at the University of Michigan, Ann Arbor, where she is a Professor, with a joint appointment as Professor of EECS. She has also served as associate dean for research of the University of Michigan College of Engineering. Her research interests lie broadly in the area of control systems, including applications to robotics and manufacturing systems. She has published more than 150 articles in refereed journals and conference proceedings. She was elected Fellow of the Institute of Electrical and Electronic Engineers (IEEE) in 2008 and Fellow of The American Society of Mechanical Engineers (ASME) in 2012, and is a Life Member of the Society of Women Engineers (SWE).

**Dr. Jim Kurose**

Jim Kurose is the Assistant Director of the National Science Foundation (NSF) for Computer and Information Science and Engineering (CISE). He leads the CISE Directorate, with an annual budget of nearly $1B, in its mission to uphold the nation's leadership in scientific discovery and engineering innovation through its support of fundamental research in computer and information science and engineering and transformative advances in cyberinfrastructure. Recently, Dr. Kurose also served as the Assistant Director for Artificial Intelligence in the US Office of Science and Technology Policy (OSTP). Dr. Kurose is on leave from the University of Massachusetts Amherst (UMass Amherst), where he is a Distinguished Professor in the College of Information and Computer Sciences. His research interests include computer network protocols and architecture, network measurement, sensor networks, multimedia communication, and modeling and performance evaluation. Dr. Kurose has served on many national and international boards and panels, including the Board of Directors of the Computing Research Association and the Board of Governors of the IEEE Communications Society. With Keith Ross, he is the co-author of the textbook, Computer Networking, a Top Down Approach (7th edition, 2016) published by Pearson. Dr. Kurose received his Ph.D. in computer science from Columbia University and a Bachelor of Arts degree in physics from Wesleyan University. He is a Fellow of the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronic Engineers (IEEE).

**Dr. Arthur 'Skip' Lupia**

Since September 2018, Dr. Arthur (Skip) Lupia has served as Assistant Director of the National Science Foundation (NSF) for Social, Behavioral, and Economic Sciences (SBE). The SBE directorate supports fundamental research in behavioral, cognitive, social and economic sciences. Dr. Lupia has more than 25 years of leadership and management experience in the social sciences community. He served as the Hal R. Varian Collegiate Professor of Political Science at the University of Michigan since 2006. He has formerly chaired the board for the Center for Open Science and the National Academies Roundtable on the Communication and Use of Social and Behavioral Sciences. His work on science communication and civic education has influenced scholarly practice, policymakers, and classroom teaching around the world. He authored or co-authored six books and more than 90 scholarly articles, and he has made more than 500 professional presentations. Dr. Lupia has won numerous awards and honors, including a Carnegie fellowship, Guggenheim fellowship, and the National Academy of Science's Award for Initiatives in Research. Dr. Lupia has a bachelor's degree in economics from the University of Rochester and master's and doctoral degrees in social science from the California Institute of Technology.