

ASEE EDC 2018 Public Policy Colloquium

Speaker Biographies

Jason Botel

Jason Botel, Principal Deputy Assistant Secretary, Delegated the Authority to Perform the Functions and Duties of the Assistant Secretary of Elementary and Secondary Education.

Jason first began his service at the Department of Education in the role of Senior White House Advisor for Education. Botel started his career teaching at Booker T. Washington Middle School in West Baltimore as a Teach For America corps member and went on to serve as founding principal and executive director of KIPP Baltimore. Most recently, he was the executive director of MarylandCAN. Botel holds a bachelor's and master's degree in English from the University of Pennsylvania and a master's degree in education administration and supervision from National-Louis University.



Janice Cuny

Jan Cuny was a computer science (CS) professor at Purdue, the University of Massachusetts and the University of Oregon before moving to the Computer and Information Science and Engineering (CISE) Directorate at the National Science Foundation (NSF). There, Jan leads CISE efforts on broadening participation and education in computing. Over the last decade, she spearheaded an effort to get inclusive, rigorous, academic computing courses into U.S. K-12 classrooms—an effort that catalyzed the current, national CSforAll movement. She also funded the development of 8 national Alliances focused on broadening participation K-20, and she is currently working on a new CISE effort on undergraduate education. Through all of this work, she has built a thriving community of NSF Principal Investigators and partnering organizations around broadening participation and education in computing.



For her efforts on behalf of underserved populations, Jan has received a number of awards including the 2006 ACM President's Award, the 2007 CRA A. Nico Habermann Award, the 2009 Anita Borg Institute's Woman of Vision Award for Social Impact, the 2015 NSF Distinguished Service Award, and the 2016 SIGCSE Distinguished Educator Award.

Ross DeVol

Ross DeVol is a Walton Fellow, Walton Family Foundation, a program enlisting subject-matter experts to conduct research and develop best practices that support the foundation's philanthropic efforts. DeVol studies national economic trends and how they impact the American heartland. He is assessing opportunities for regional innovation ecosystems which foster job creation, wage gains and economic growth for the non-coastal areas of the nation. DeVol will help identify the tools needed for a stronger entrepreneurial ecosystem in the American heartland. He will work with universities, colleges, the business community, public policy leaders and philanthropy to analyze resources supporting the startup community and identify workforce and talent gaps. DeVol is former chief research officer for the Milken Institute where he spent nearly 20 years, an economic think tank headquartered in California. He oversaw research on international, national and comparative regional growth performance; access to capital and its role in economic growth and job creation; and health-related topics. He has been ranked among the "Superstars of Think Tank Scholars" by International Economy magazine.



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Heidi Heitkamp

U.S. Senator Heidi Heitkamp is the first female Senator elected from North Dakota. She took the oath of office on January 3, 2013. Senator Heitkamp grew up in a large family in the small town of Mantador, North Dakota. Alongside her six brothers and sisters, she learned the value of hard work and responsibility, leading her to choose a life of public service.

Already in her short time in the U.S. Senate, Senator Heitkamp has quickly become a proven senator who works across the aisle to fight for North Dakotans. Senator Heitkamp has personally shown that if senators work together, it can lead to real solutions. Senator Heitkamp sits on the Senate Agriculture Committee and Committee on Indian Affairs. She also serves on the Banking, Small Business and Homeland Security and Governmental Affairs committees. Senator Heitkamp previously served as North Dakota's Attorney General, and prior to that as the state's Tax Commissioner.



Senator Heitkamp received a B.A. from the University of North Dakota and a law degree from Lewis and Clark Law School.

Matt Hourihan

Hourihan is the director of the R&D Budget and Policy Program for the American Association for the Advancement of Science (AAAS), where he is a regular source of information and analyses on past, present, and future science budgets for policymakers and the science community. He has served in this position since 2011.

Prior to joining AAAS, he served as a clean energy policy analyst at the Information Technology & Innovation Foundation (ITIF). While at ITIF, he tracked federal energy R&D investments and innovation activities, and authored several white papers and policy briefs exploring the role of innovation in solving the nation's energy and climate challenges. He also regularly coordinated Congressional briefings, conferences, and events bringing together leading experts in government, industry, and academia. Previously, he served as Jan Schori Fellow at the Business Council for Sustainable Energy, a coalition of energy firms and utilities working to engage policymakers for market-based solutions to sustainable energy development and climate change.



As a student, he interned with the AAAS Center for Science, Technology and Congress, now the Office of Government Relations. He earned a master's degree in public policy with a focus on science and technology policy at George Mason University, and a B.A. in journalism from Ithaca College. He has also served as a cause communications professional and journalist in a variety of roles.

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Otto Katt

Otto Katt, Lewis-Burke Associates LLC, Otto Katt advocates for ASEE interests in the areas of higher education, tax, and immigration. Previously, Mr. Katt served as the education advisor for Representative Phil Roe (R-TN) who serves on the House Education and the Workforce Committee. In his role with the Office of Representative Roe, 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. Prior to working for Representative Roe, Mr. Katt worked as a teacher, administrator, and program manager. These experiences include serving as a Teach For America Corps member and inaugural Program Manager for Heart Math Tutoring. Mr. Katt has worked in schools in New Jersey, Massachusetts, and North Carolina. Mr. Katt received his B.A. in history from The College of New Jersey and his Masters in international studies: Latin America from the University of Connecticut.



Jeffrey Mervis

Jeffrey Mervis is a senior correspondent at Science magazine. He writes about all areas of science policy, with the goal of explaining how government works to an international audience both in print and online. He also covers STEM education and workforce issues.



Mike Molnar

Mike Molnar is the founding director of the Office of Advanced Manufacturing (OAM) at the National Institute of Standards and Technology (NIST), and the Advanced Manufacturing National Program Office (AMNPO), an interagency team which serves as the Congressionally designated program office for Manufacturing USA – the National Network for Manufacturing Innovation www.ManufacturingUSA.com.

Mike joined NIST in 2011. Prior to federal service Mike had over 25 years a 30-year industry career in advanced manufacturing, with leadership roles in manufacturing technology development, corporate manufacturing engineering, capital planning, metrology, quality systems, robotics and flexible automation, and computer integrated manufacturing systems. Mid-career Mike served as the manufacturing policy Fellow in the White House Office of Science and Technology Policy.



Mike is well known in industry and academia, with over thirty years of leadership roles in manufacturing professional societies and associations – most recently as the President of the Society of Manufacturing Engineers and now Governor of the American Society of Mechanical Engineers. He is a licensed Professional Engineer, Certified Manufacturing Engineer, and was elected Fellow of both ASME and SME. He was recently recognized with the Golden Eagle award from the Boy Scouts of America and the Merchant Manufacturing Medal of ASME/SME.

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Libby O'Hare

Libby O'Hare, Lewis-Burke Associates LLC, leverages her biomedical research expertise, background in research administration policy, and experience on Capitol Hill to provide strategic analysis and support to clients in the areas of biomedical research as well as research policy and regulation and STEM education. Prior to joining Lewis-Burke, Dr. O'Hare was a Program Officer with the Board on Higher Education and Workforce at the National Academies of Sciences, Engineering and Medicine where she managed policy studies examining the regulatory structure governing scientific research, the competitiveness of American research universities and STEM workforce development. In her role at the National Academies, Dr. O'Hare worked with higher education leaders to provide government, academic and industry leaders with analysis and recommendations designed to inform action on issues in higher education and the science and engineering workforce. Dr. O'Hare previously served as a Legislative Assistant for Representative Rush Holt, where she handled energy, science and education policy issues and staffed Rep. Holt in his role as the Senior Democrat on the Energy and Mineral Resources Subcommittee, House Committee on Natural Resources. Dr. O'Hare got her start in science policy after being selected by the Society for Research on Child Development as a 2010 American Association for the Advancement of Science (AAAS) Congressional Science Policy Fellow. Her academic research career focused on understanding relationships between changes in brain structure and the development of reasoning, memory, and problem solving abilities in children and adolescents. Dr. O'Hare holds a Ph.D. in Neuroscience from the University of California, Los Angeles and an A.B. in Psychology from Bryn Mawr College.



Greg Pearson

Greg Pearson is a Scholar with the National Academy of Engineering (NAE) in Washington, D.C. Greg currently serves as the responsible staff officer for two NSF-funded projects, one examining the status, role, and needs of engineering technology education in the United States, the other addressing issues related to capacity building for K-12 engineering educators. He also directs the Chevron-funded LinkEngineering online resource that is helping guide implementation of PreK-12 engineering education in the United States. Previously, he has overseen projects addressing: STEM integration in K-12 education; standards for K-12 engineering education; the status and prospects for engineering in K-12 education; new messaging for the field of engineering (*Changing the Conversation*); technological literacy; and content standards for the field of technology education. He has degrees in biology and journalism.



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Miriam Quintal

Miriam Quintal, Lewis-Burke Associates LLC, leads federal relations efforts on behalf of ASEE. In October 2017, ASEE began working with Lewis-Burke, a leading DC-based government relations firm, to advocate for federal funding for engineering education and research, influence important policy discussions on relevant federal programs, and enhance ASEE's profile and voice within the higher education and research communities. In addition to her work advancing ASEE federal relations goals, Miriam leads the firm's practice in STEM education, computing and computational science as well as advancing client interests related to the National Science Foundation (NSF). She uses her scientific training, ability to analyze complex issues, and skill at relationship building to manage federal relations portfolios for large academic institutions, scientific societies, and facility management organizations. She works closely with partners in higher education associations and scientific policy coalitions. Before joining Lewis-Burke, Ms. Quintal gained policy experience as a Mirzayan Science and Technology Policy Fellow with the Board on Science Education at the National Academy of Sciences. Ms. Quintal holds a Masters in organic chemistry from Harvard University and a Bachelor of Arts with highest honors in chemistry from Smith College. She has been an NSF Graduate Research Fellow and a Fulbright Fellow.



Hanan Saab

Hanan Saab serves as APLU's [Association of Public and Land-grant Universities] Assistant Director for International Issues within the Office of Congressional & Governmental Affairs. In this role she leads the association's advocacy on higher education issues related to immigration and visa policy, study abroad, international education, international agriculture and international development.

Hanan previously worked at NAFSA: Association of International Educators where she most recently served as Manager for Public Policy and the legislative lead for the organization's Cuba portfolio. Prior to NAFSA, Hanan managed student services for study abroad programs in Europe, the Middle East and North Africa for a D.C.-based education abroad provider.



A Minnesota native, Hanan recently served as an education policy fellow in the Office of U.S. Senator Al Franken (D-MN). She earned her political science degree at the University of Minnesota, where she also began her career at the institution's Learning Abroad Center. Her extensive international experiences include a year of foreign policy study at the American University in Cairo.

Josh Shiode

Josh Shiode is director of government affairs at SIA. In this capacity, Josh advocates SIA's positions on research and development, workforce, and anti-counterfeit policy issues before the U.S. Congress and Executive Branch. Before joining SIA in 2017, Josh was most recently senior government relations officer for the American Association for the Advancement of Science. Josh began his career in Washington as the John N. Bahcall Public Policy Fellow of the American Astronomical Society. Josh received his B.A. in astronomy and physics from Boston University and his Ph.D. in astrophysics from the University of California, Berkeley.



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Natalie Shirley

In January 2018 Natalie Shirley was hired as the first female President and CEO of the National Cowboy & Western Heritage Museum in Oklahoma City. Prior to that she concurrently served as president of Oklahoma State University-Oklahoma City and as Oklahoma Secretary of Education and Workforce Development. Serving as the Secretary from 2015-2018, Shirley worked with the Governor to implement the Oklahoma Works program, designed to increase educational attainment for Oklahomans to produce a more educated workforce to support and cultivate the state's economy.



From 2007-2011, she served in Governor Brad Henry's Cabinet as Oklahoma Secretary of Commerce and Tourism. Shirley was responsible for the Workforce department and was the liaison between the governor, five major state agencies, and more than 30 small agencies, authorities, and institutions. During this time, she also served as Executive Director of the Department of Commerce, the state's leading economic development agency.

Formerly, Shirley was president of ICI Mutual in Washington, D.C., after serving in various leadership offices in the company. She currently also serves on several business boards. An Oklahoma native, she graduated from Oklahoma State University and earned a law degree from the University of Oklahoma.

Tobin Smith

Tobin (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. 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 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 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.

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Dawn Tilbury

Dawn M. Tilbury received the B.S. degree in Electrical Engineering, *summa cum laude*, from the University of Minnesota in 1989, and the 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 currently Professor, with a joint appointment as Professor of EECS. 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 IEEE in 2008 and Fellow of the ASME in 2012, and is a Life Member of SWE. Since June 2017, she has been the Assistant Director for Engineering at the National Science Foundation.



Simon J. Tripp

Simon Tripp is a principal and senior director at TEconomy Partners, a leading research and strategic planning firm specializing in science and technology-based economic development, public policy and impact assessment. Mr. Tripp's base of clients includes major research universities, academic medical centers, national and state governments, regional economic development organizations, major industry associations, and foundations. His impact analysis expertise includes pioneering work in the evaluation of the functional impacts of scientific research and technological innovations, and his study of the Economic Impact of the Human Genome Project is highly cited and was highlighted by President Obama in his State of the Union address regarding the importance of federal funding for science and innovation. His work evaluating agriscience impacts was recently published in Springer's new book "From Agriscience to Agribusiness" (Kalaitzandonakes et al) building upon work conducted across all U.S. Land-grant universities for the USDA's National Institute of Food and Agriculture (NIFA). His most recent impact analysis, titled "The Importance of Research Universities" was funded by the Lilly Endowment. Prior to cofounding TEconomy Partners, Mr. Tripp was Senior Director of the Battelle Memorial Institute's Technology Partnership Practice. He holds an MA in geography from West Virginia University and a BA (Hons) in geography from Portsmouth Polytechnic in the UK.

