

ASEE EDC 2017 Public Policy Colloquium

Speaker Biographies

James Brown

James Brown is the Executive Director of the STEM Education Coalition, an alliance of more than 600 business, professional, and education organizations, that works to raise awareness in Congress, the Administration, and other organizations about the critical role that STEM education plays in enabling the U.S. to remain the economic and technological leader of the global marketplace of the 21st century. Prior to joining the Coalition, he was Assistant Director for Advocacy at the American Chemical Society. A nuclear engineer by training, he previously worked as a Legislative Aide for Rep. Doc Hastings of Washington, was Director of Policy and Development at the Consumer Energy Council of America, and began his career as an engineer with Newport News Shipbuilding, working on aircraft carrier construction. He received a B.S. from the University of New Mexico and an M.S. from Penn State, both in nuclear engineering. He also holds an MBA from George Washington University.



Richard B. Brown

Richard B. Brown earned an EE Ph.D. from the University of Utah. His dissertation produced one of the first smart sensors, an array of miniature ion-selective electrodes with integrated electronics.

He started his academic career at the University of Michigan, where he developed the VLSI program and conducted research on microprocessor design, silicon-based chemical sensors, and brain probes. At Michigan he held an Arthur F. Thurnau Endowed Professorship.

In 2004, he was appointed Dean of the College of Engineering at the University of Utah. The College has since grown faculty positions from 111 to 198, engineering degrees granted by 86% and research expenditures from \$25M to \$81.5M/yr. Since 2006, the College has spun out 57 companies.

Prof. Brown has 17 patents and has authored more than 225 peer-reviewed publications. He is a founder of i-SENS (glucose sensors), Sencore (chemical sensors), Mobius Microsystems (all-silicon clock generators), and e-SENS (water chemistry sensors).



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John R. English

John R. English is a respected expert on quality and reliability engineering. He is the ninth dean of the University of Arkansas (UofA) College of Engineering and is the holder of the Irma F. and Raymond F. Giffels Endowed Chair. English was dean of engineering at Kansas State and holder of the LeRoy C. and Aileen H. Paslay Chair for six years prior to returning to his alma mater (the UofA) as dean. English was a faculty member in the University of Arkansas department of industrial engineering from 1991 to 2007, as well as head of the department from 2000 to 2007. He was also on the faculty at Texas A&M University and gained industry experience at AT&T Communications. English holds a doctorate in industrial engineering and management from Oklahoma State University. He received a bachelor's degree in electrical engineering and a master's degree in operations research from the UofA.



Robert B. Hardy

Robert B. Hardy is Director of Contracts and Intellectual Property Management at the Council on Governmental Relations (COGR; www.cogr.edu), an association of 190 research universities and several affiliated hospitals and research institutes. COGR focuses on the impact of government policies and regulations on university research. Mr. Hardy has lead COGR responsibility for university issues pertaining to federal contracting and technology transfer policies and regulations.

Prior to coming to COGR in April 2001, Mr. Hardy was with the National Science Foundation (NSF) for over 30 years, serving in a variety of capacities, including Special Assistant to the Director and Deputy Director of the Division of International Programs. During the last eight years of his NSF career he served as Director of the Division of Contracts, Policy and Oversight. For his service during his NSF career Mr. Hardy received NSF's highest honor, the NSF Distinguished Service Award.

While at NSF Mr. Hardy served on numerous interagency task forces and working groups and also co-chaired the Federal Demonstration Partnership Membership Committee. He has authored a number of publications on issues related to research administration, intellectual property, and government regulations that affect universities and has made many presentations to university groups such as NCURA, SRA, AUTM, NACUA and NECA. Since coming to COGR Mr. Hardy has focused particularly on government security regulations affecting the conduct of research at universities as well as rights to intellectual property under federal awards. In 2011 he received AUTM's highest award, the Bayh-Dole Award.

Mr. Hardy holds a B.A. degree from Gettysburg College and J.D. from Catholic University, and is a member of the Bars of Maryland and the District of Columbia.

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Sen. Maggie Hassan

Elected to the United States Senate in 2016, Maggie Hassan is focused on listening to the people of New Hampshire and working with members of both parties to solve problems and help expand middle class opportunity, support innovative small businesses, and keep New Hampshire and America safe, secure, and strong. She is the second woman in American history to be elected as both Governor and United States Senator, along with fellow New Hampshire Senator Jeanne Shaheen.



Senator Hassan was drawn to public service as an advocate fighting to ensure that children like her son Ben, who experiences severe disabilities, would be fully included in their communities and have the same opportunities that all parents want for their children.

She has continued working to ensure that all Granite Staters have the opportunity to thrive, serving for three terms in the New Hampshire State Senate, two terms as Governor of New Hampshire, and now as a United States Senator.

Maggie Hassan earned her B.A. from Brown University and her J.D. from the Northeastern School of Law. She and her husband, Tom, who serves as the President of School Year Abroad, are the proud parents of two children, Ben (28) and Meg (24).

Gerald D. Holder

Gerald D. Holder is U.S. Steel Dean of Engineering, Distinguished Service Professor and Professor of Chemical Engineering at the Swanson School of Engineering at the University of Pittsburgh. He received his BA from Kalamazoo College and his BSE, MSE and PhD in Chemical Engineering from the University of Michigan. He has served on the faculties of Columbia University and subsequently the University of Pittsburgh. He has been Dean of the Swanson School since 1996 leading a period of substantial growth in enrollment, student quality, and faculty research. He has also had brief periods of employment at Exxon, Gulf Oil and General Motors.



Dr. Holder is a member of ASEE, AIChE – Fellow, SPE, AAAS - Fellow, and ACS. He currently serves as Chair of the ASEE EDC Executive Board.

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Rush D. Holt

Rush D. Holt, Ph.D., became the 18th chief executive officer of the American Association for the Advancement of Science (AAAS) and executive publisher of the Science family of journals in February 2015. In this role, Holt leads the world's largest multi-disciplinary scientific and engineering society.

Before coming to AAAS, Holt served for 16 years as a member of the U.S. House of Representatives, representing New Jersey's 12th Congressional District. In Congress, Holt served as a senior member of the Committee on Natural Resources and the Committee on Education and the Workforce. On Capitol Hill, Holt established a long track record of advocacy for federal investment in research and development, science education, and innovation.



Photo by Chet Susslin/ National Journal

He has also received awards from the American Chemical Society, the American Association of University Professors, the National Association of Graduate-Professional Students, the American Institute for Medical and Biological Engineering, the Council of Scientific Society Presidents, the American Geophysical Union, and the Biotechnology Industry Organization. From December 2014 to February 2015, Holt was appointed a Director's Visiting Scholar at the Institute for Advanced Study in Princeton, New Jersey. Holt is a Phi Beta Kappa graduate of Carleton College in Northfield, Minnesota, and he holds M.A. and Ph.D. degrees in physics from New York University. He is an elected fellow of AAAS, the American Physical Society, and Sigma Xi, and he holds honorary degrees from Monmouth University, Rider University, and Thomas Edison State College.

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 masters 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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Walter F. Jones

Dr. Walter F. Jones joined the Office of Naval Research in September 2007, as executive director. He is the senior civilian manager at ONR, and provides executive, technical, and scientific direction in the performance of ONR's mission of planning and managing science and technology research for the Department of the Navy. He works closely with ONR's Directorate leads in the identification, prioritization, and support of specific areas of science and technology development.



Jones has held a wide variety of positions in government and academia, including director, Aerospace and Materials Sciences, Air Force Office of Scientific Research, Arlington, Va, and senior program analyst with the Office of the Deputy Director of Central Intelligence for Community Management. Jones has held faculty positions at the University of Florida, University of Tennessee, and Clemson University.

He received his Ph.D. and M.S. in engineering mechanics and a B.S. in mechanical engineering from Clemson University. He also has an M.S. in national resource strategy from the Industrial College of the Armed Forces at Ft. Lesley J. McNair in Washington, D.C.

John Mason

Dr. John Mason currently serves as the Vice President for Research and Economic Development at Auburn University. He is also the President/CEO of the Auburn Research and Technology Foundation.

His duties include budget planning and allocations, personnel, compliance, economic development relations, and research related legislative (federal and state) initiatives.

Prior to joining Auburn University, Dr. Mason was the Associate Dean for Graduate Studies, Research and Outreach in the College of Engineering at Penn State University. He was a Professor of Civil Engineering and had served as the Director of the Pennsylvania Transportation Institute. Dr. Mason also served as a past chair of the ASEE - Engineering Research Council.



Dr. Mason holds a BS degree from Penn State University, an MS from Villanova University, and a PhD in Civil Engineering from Texas A & M University. He is a Fellow of the ITE and a licensed Professional Engineer.

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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.



Don L. Millard

Dr. Millard is currently serving as the Acting Division Director and the Deputy Division Director of the Engineering Education and Centers (EEC) Division, within the Engineering Directorate at the National Science Foundation (NSF). At NSF, he has served in a number of roles, as an acting Division Director, a Deputy Division Director and a Program Director -- involved with the Advanced Technology Education (ATE) program, the Math and Science Partnership (MSP) program, and the Transforming Undergraduate Education in Science, Technology, Engineering and Math (TUES) program (as the program lead). He also served as a founder of both the EHR Core Research (ECR) and the Innovation Corps (I-Corps) programs.



Prior to joining NSF, Dr. Millard spent 27 years at Rensselaer Polytechnic Institute where he served as a faculty member of the Electrical, Computer, and Systems Department and directed a number of research centers; including the Center for Integrated Electronics and the Academy of Electronic Media. Dr. Millard's research interests include electronics design and manufacturing, electrical testing/evaluation methodologies, semiconductor fabrication, electronic media development, information technology, and engineering education. He is the creator of the Mobile Studio project, which enables students to perform experiments that use an oscilloscope, function generator, digital control, and some form of power supply (in a portable package) - and learn at anytime, anyplace. He holds a patent for the development of a laser-induced, plasma-based Non-Contact Electrical Pathway and has received such awards as the Best Paper Award of the Institute of Electronics and Electrical Engineers (IEEE) and the Premier Award for Excellence in Engineering Education Courseware. Dr. Millard has been voted Professor of the Year on three occasions, selected as RHA Professor of the Month and was chosen as the Eta Kappa Nu Outstanding Professor.

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Michael F. Molnar

Mike Molnar is the founding director of the Advanced Manufacturing National Program Office, an interagency team hosted at the National Institute of Standards and Technology (NIST). This interagency team works to coordinate federal activities in advanced manufacturing, and is the Congressionally designated National Program Office for Manufacturing USA – the National Network for Manufacturing Innovation. Prior to federal service Mike had a successful industry career of over 25 years in advanced manufacturing with leadership roles in technology development, advanced manufacturing engineering, capital planning, metrology, quality systems, automation, and industrial controls. Mike currently is Assistant Scoutmaster of BSA Troop 945, and is proud to note his son Jonathan (as Mike did as a youth) will earn Eagle Scout rank in February 2017. For more information on the Manufacturing USA program please see www.ManufacturingUSA.com



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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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.

Rep. Bruce Westerman

A lifelong resident of Garland County, Congressman Bruce Westerman was elected the 20th representative of the Fourth Congressional District of Arkansas in 2014. He serves on the Committee on Natural Resources, the Committee on the Budget, and the Committee on Science, Space, and Technology, where he is the Vice Chair of the Environment Subcommittee. Westerman also serves on the Majority Whip Team under the leadership of House Majority Whip Steve Scalise.



Twice elected to the Arkansas General Assembly, Westerman was Arkansas' first Republican House Majority Leader since Reconstruction. He was an architect of the House Republican SIMPLE Plan which led to the 2013 Republican takeover of the Arkansas House of Representatives.

An engineer and forester for 22 years at Mid-South Engineering in Hot Springs, Westerman is a registered professional engineer and forester. In 2013, he was named Engineer of the Year by the Arkansas Society of Professional Engineers.

Westerman graduated with a Bachelor of Science degree in Biological and Agricultural Engineering from the University of Arkansas in 1990. While at Arkansas, Westerman was a four-year walk-on member of the Razorback Football Team. He received the Outstanding Young Alumni Award in 2005 and the Distinguished Alumni Award in 2012. He earned a Master of Forestry degree from Yale University in 2001. Westerman is a former board member of the Fountain Lake School District and serves as a deacon at Walnut Valley Baptist Church. He lives in Hot Springs with his wife Sharon and their four children.

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Kevin J. Wolf

Kevin J. Wolf is a partner in the international trade practice at Akin Gump Strauss Hauer & Feld LLP. Mr. Wolf served for seven years (2010-2017) as Assistant Secretary of Commerce for Export Administration in the Bureau of Industry and Security (BIS) at the Department of Commerce, where he developed and implemented policies pertaining to Export Administration issues and providing overall direction to and management of BIS's national security, nonproliferation, foreign policy, national defense and strategic industrial resource functions. He is the primary author of the U.S. export control rules pertaining to the definitions of fundamental research, publicly available information, educational information, technology and related concepts. If you do not like the definitions, then his position is that the State Department is the author. His experience encompasses the laws, regulations, policies and international arrangements pertaining to national security, foreign policy and other controls over the export, reexport and transfer of military, dual-use and other commodities, technologies, software and services to various destinations, end uses and end users. His work focuses on international trade regulatory and related matters involving primarily the Export Administration Regulations (EAR), the International Traffic in Arms Regulations (ITAR), sanctions administered by the Office of Foreign Assets Control (OFAC), the Foreign Corrupt Practices Act (FCPA) and the Committee on Foreign Investment in the United States (CFIUS) regulations and process.



Dennis Yablonsky

Dennis Yablonsky became the CEO of the Allegheny Conference on Community Development and its Affiliates – the Greater Pittsburgh Chamber of Commerce, the Pennsylvania Economy League of Southwestern Pennsylvania and the Pittsburgh Regional Alliance – on March 24, 2009.

A native of the Pittsburgh region, Dennis is an experienced veteran of managing and leading innovative organizations – as a private business leader, a nonprofit economic development professional and a high-ranking appointed government official.



Serving as Secretary of the Pennsylvania Department of Community and Economic Development (DCED) from 2003 to 2008, he developed a \$3 billion economic stimulus program to support critical infrastructure, core communities and job-producing businesses.

Additional positions include being the founding CEO of the Pittsburgh Digital Greenhouse and the Pittsburgh Life Sciences Greenhouse, and COO of software company Cincom Systems and CEO of the Carnegie Group, and a recipient of an honorary doctor of humane letters degree from Point Park University for his leadership in the Pittsburgh region.