2020 Engineering Deans Public Policy Colloquium
Fairmont Hotel ● Washington, DC ● February 3-5, 2020

PROGRAM BOOK
ABOUT THE COLLOQUIUM

The Public Policy Colloquium of the ASEE Engineering Deans Council (EDC) is organized by the Public Policy Committee of the EDC.

This year’s Colloquium focuses on the engineering and computer science talent America will need by 2050 and the policies that must be adopted now to ensure those needs are met. A gap already exists between the nation’s demand for talent and what our engineering schools currently supply, and it is expected to grow in the years ahead. In addition to keynotes, the Colloquium will consider the “gap” from three perspectives:

- Attracting International Talent – Policy Barriers and Opportunities
- Promoting an Inclusive Environment: Preventing Sexual Harassment
- Workforce Employer Needs

Our hope is to provide attendees with information and tools that will enable us, collectively, to influence policymakers. In addition, the PPC will provide attendees with agency research perspectives and a forum to discuss the broad landscape for engineering education and research, and bring the community together to advocate for critical policy priorities.
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.

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Vijay Kumar, University of Pennsylvania
Wendi Heinzelman, University of Rochester

ASEE’s Washington Representatives, Lewis-Burke Associates LLC

Miriam Quintal, Team Lead
Amanda Bruno
Otto Katt
Libby O’Hare
Eliana Perlmutter
Bill Ruch
### MONDAY, FEBRUARY 3 2020

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<th>Time</th>
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<tr>
<td>1:00 p.m. - 6:00 p.m.</td>
<td><strong>Registration</strong></td>
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<td>Sulgrave Foyer</td>
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<td>1:30 p.m. - 5:30 p.m.</td>
<td><strong>Provosts’ Meeting</strong> <em>(Invitation Only)</em></td>
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<td>Culpeper</td>
<td>More than 40 former engineering deans are filling university leadership roles as provosts. Their background as engineers gives them a unique perspective on important technology-education policy challenges. This small pilot meeting, in parallel with the PPC, will convene approximately 20 provosts for two sessions: a discussion with the White House and federal agencies on science and security, access to scholarly communications, and research integrity policies; and a provosts’ roundtable. Attendees will join the PPC reception Monday evening.</td>
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<td>3:00 p.m. - 5:30 p.m.</td>
<td><strong>New Deans’ Orientation</strong></td>
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<td>Roosevelt</td>
<td>The goal of this session is for new deans to become familiar with key federal issues and the process of working with legislators and their staffs. This interactive orientation will feature an introduction to ASEE, the Engineering Deans Council, and the Public Policy Colloquium, as well as an overview of the federal government and advocacy for research and higher education. Deans will have an opportunity to share their federal concerns and interests. The orientation will also feature remarks by Dawn Tilbury, Assistant Director for Engineering at the National Science Foundation (NSF), who will explain how deans can work with NSF to advance engineering research and education priorities. All deans who would like a refresher on these topics are welcome to attend.</td>
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<td><strong>Speakers:</strong></td>
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<td><strong>Miriam Quintal,</strong> <em>ASEE Washington Representative and Managing Principal, Lewis-Burke Associates LLC</em></td>
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<td><strong>Dawn Tilbury,</strong> <em>Assistant Director for Engineering, National Science Foundation</em></td>
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<td><strong>Organizers:</strong></td>
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<td><strong>Wendi Heinzelman,</strong> <em>University of Rochester</em></td>
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<td><strong>Paul Tikalsky,</strong> <em>Oklahoma State University</em></td>
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Engineering Education: Une Célébration Internationale

ASEE 127th Annual Conference | June 21-24, 2020

Palais des congrès de Montréal | Montréal, Quebec, Canada

Registration Now Open!

https://www.asee.org/annual-conference/2020/registration
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<th>Speakers/Introductions</th>
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| 6:00 p.m. – 8:00 p.m. | Opening Reception                         | Sulgrave Foyer | **Speakers:**
|               |                                            |                | *Karen Marrongelle, Assistant Director for Education and Human Resources, National Science Foundation (NSF)*
|               |                                            |                | *Margaret Martonosi, Assistant Director for Computer and Information Science and Engineering, NSF* |
|               |                                            |                | **Introduction:**
|               |                                            |                | *Dawn Tilbury, NSF Assistant Director for Engineering* |

### TUESDAY, FEBRUARY 4, 2020

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<td>7:30 a.m. – 5:00 p.m.</td>
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<td>7:45 a.m. – 8:45 a.m.</td>
<td>Breakfast</td>
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| 8:45 a.m. – 9:00 a.m. | Welcome and Introduction                  | Kennedy Ballroom | *Stephanie Adams, University of Texas at Dallas, ASEE President*  
|               |                                            |                | *JB Holston, University of Denver*                            |
| 9:00 a.m. – 9:50 a.m. | Washington Update                         | Kennedy Ballroom | **Speaker:**
|               |                                            |                | *Miriam Quintal, ASEE Washington Representatives, Lewis-Burke Associates LLC* |
|               |                                            |                | Ms. Quintal will discuss the current state of play in Washington and the outlook for ASEE’s 2020 advocacy priorities, including funding and policies for research, education, and immigration. |
ASEE's Corporate Member Council, in partnership with Automation Alley, is hosting a national summit devoted to preparing graduates for Industry 4.0 and beyond. Academics from engineering, engineering technology, and engineering technician programs will share ideas and proposals with representatives of industry and professional societies, as well as policy makers and accreditors. The Summit will produce consensus recommendations of changes and improvements in curricula, work-based experiences, policies, and practices in training America’s technical and engineering workforce.

General Summit Registration
Academic Representative (administrators, faculty and/or staff) - $495
Non Profit Representative (professional society or accreditors) - $495
Government Representatives – Free
Industrial Representative – Free as guest of academic registrant
Industrial Representative - $1,500 which includes year of ASEE membership

Banquet
A formal banquet will be held in conjunction with the Summit on October 8, 2020, 7 pm Omni Shoreham Ballroom
Ticket (individual) - $100

Sponsored Tables
Gold Table $5,000 includes 8 seats at tier 1 table and 5 additional conference registrations
Silver Table $2,500 includes 4 seats and 2 additional conference registrations

Contact Stephanie Harrington s.harrington@asee.org or 202.331.3521
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<td>9:50 a.m. – 10:10 a.m.</td>
<td>Quick Takes</td>
<td>Kennedy Ballroom</td>
<td>This session will feature flash talks by individual deans about initiatives on their campuses related to public policy. Organizers: Kazem Kazerounian, University of Connecticut, Jelena Kovacevic, New York University</td>
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<td>10:10 a.m. – 10:20 a.m.</td>
<td>Refreshment Break</td>
<td>Ballroom I Foyer</td>
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<td>10:20 a.m. – 11:20 a.m.</td>
<td>Keynote</td>
<td>Kennedy Ballroom</td>
<td>Speaker: Mark Lewis, Director of Defense Research and Engineering for Modernization, Department of Defense. Dr. Lewis will discuss the Department of Defense’s research modernization efforts around critical technology areas including AI, quantum, biotechnology, microelectronics, and space. Moderator: Vijay Kumar, University of Pennsylvania</td>
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<td>11:20 a.m. – 12:30 p.m.</td>
<td>Attracting International Talent</td>
<td>Kennedy Ballroom</td>
<td>Speakers: Jane Goodyer, Dean of Engineering, York University, Neil Ruiz, Associate Director for Global Migration and Demographic Research, Pew Research Center, Anthony Koliha, Director, Office of Global Educational Programs, U.S. Department of State. Moderators: Alexander Wolf, University of California, Santa Cruz, Aaron Bobick, Washington University in Saint Louis. Organizers: Alexander Wolf, University of California, Santa Cruz, Aaron Bobick, Washington University in Saint Louis, Cammy Abernathy, University of Florida</td>
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<td>12:30 p.m. – 2:00 p.m.</td>
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<td>2:00 p.m. – 3:00 p.m.</td>
<td>Promoting an Inclusive Environment: Preventing Sexual Harassment</td>
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<td><strong>Speakers:</strong></td>
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<td>Frazier Benya, Senior Program Officer at the National Academies of Sciences, Engineering, and Medicine</td>
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<td>Al Romig, Executive Officer, National Academy of Engineering</td>
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<td><strong>Moderator:</strong></td>
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<td>Gilda Barabino, City College of New York</td>
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<td>Dr. Frazier Benya will discuss the National Academies 2018 report Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine. The session will include discussion of policy recommendations and how the Academies has been working since publication of the report to convene stakeholders and drive the conversation.</td>
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<td>Greg Washington, University of California, Irvine</td>
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<td>Jelena Kovacevic, New York University</td>
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| 3:30 p.m. – 5:00 p.m. | **Workforce Employer Needs**                                       | Kennedy Ballroom | **Speakers:**
|                  | **Michael Cox,** Vice President and Head of Global Talent, Boeing  |                | **Jagadeesh Pamulapati, Director, Defense Laboratories Office, Department of Defense**                                                     |
|                  | **Moderator:**                                                      |                | **Sheryl Ehrman, San Jose State University**                                                                                               |
|                  | **Organizers:**                                                    |                | **Hanchen Huang, University of North Texas**                                                                                               |
|                  | **Maj Mirmirani,** Embry-Riddle Aeronautical University              |                | **Paul Tikalsky, Oklahoma State University**                                                                                                |
|                  | **Sheryl Ehrman, San Jose State University**                        |                |                                                                                                                                         |
| 5:00 p.m. – 5:30 p.m. | **Preparation for Wednesday Congressional Visits**               | Kennedy Ballroom | **Speaker:**
|                  | **Miriam Quintal, ASEE Washington Representative and Managing Principal, Lewis-Burke Associates LLC** |                | Ms. Quintal will discuss how to use Wednesday’s congressional visits to advance ASEE’s policy goals and provide an overview of the talking points and materials for these meetings. |
| 6:00 p.m. – 7:30 p.m. | **Closing Reception**                                             | Ballroom I      | **Speaker:**
|                  | **Norman Fortenberry, Executive Director, ASEE**                   |                | Dr. Fortenberry will give a report on ASEE activities and accomplishments in 2019 and will look ahead to 2020 initiatives.          |
WEDNESDAY, FEBRUARY 5, 2020

8:00 a.m. – 10:00 a.m.  
Congressional Breakfast

Speakers:
U.S. Representative Bruce Westerman (R-AR)  
U.S. Representative Chrissy Houlahan (D-PA)

Representatives Bruce Westerman (R-AR) and Chrissy Houlahan (D-PA), both engineers themselves, will discuss their congressional priorities related to engineering and engineering education.

Organizer:
Aaron Bobick, Washington University in Saint Louis

10:00 a.m.  
Individual Meetings with Members of Congress and Staff

Participants are encouraged to conduct congressional visits with other deans from their states. Please note that deans are responsible for making their own arrangements for congressional visits. Lewis-Burke associates will be coordinating federal relations representatives who are helping institutions with their visits. Please make sure to include the name of any staff helping with your visits on your registration so they can be made aware of talking points and other resources. If you do not have a federal relations representative to help your state group, please contact eliana@lewis-burke.com for assistance.
2020 PPC SPEAKERS BIOGRAPHIES

STEPHANIE G. ADAMS

Stephanie G. Adams is the 5th Dean of the Eric Jonsson School of Engineering and Computer Science at the University of Texas, Dallas and President of the American Society of Engineering Education. Previously Dr. Adams served as the Dean of the Frank Batten College of Engineering and Technology at Old Dominion University (2016–2019), Department Head and Professor of Engineering Education at Virginia Tech (2011–2016) and held faculty and administrative positions at Virginia Commonwealth University (2008–2011) and the University of Nebraska-Lincoln (1998–2008).

Her research interests include: Broadening Participation, Faculty and Graduate Student Development, International/Global Education, Teamwork and Team Effectiveness, and Quality Control and Management. In 2003, she received the CAREER award from the Engineering Education and Centers Division of the National Science Foundation. Adams is a leader in the advancement and inclusion of all in science, technology, engineering, and mathematics (STEM) education. She has worked with a number of colleges and universities, government agencies and non-profit organizations on topics related to graduate education, mentoring, faculty development and diversifying STEM.

As a member of ASEE, Adams served the Engineering Management Division as Secretary, Treasurer, Program Chair, Chair and Past Chair. She also served as Vice Chair of the Working Group on Scholarly Educational Practice as a part of the Engineering Education for the Global Economy: Research, Innovation, and Practice project; Chair, Professional Interest Council I and Vice President of Professional Interest Council Chairs from 2011 to 2012. She has been a member of the DuPont Minorities Award Selection, Nominating, Awards, Fellow Membership, Risk Management and JEE Editor Search.

Adams is an honor graduate of North Carolina A&T State University, where she earned her BS in Mechanical Engineering, in 1988. In 1991, she was awarded the Master of Engineering degree in Systems Engineering from the University of Virginia. She received her Ph.D. in Interdisciplinary Engineering from Texas A&M University in 1998, where she concentrated on Industrial Engineering and Management.

FRAZIER BENYA

Frazier Benya (she/her/hers) is a Senior Program Officer at the National Academies of Sciences, Engineering, and Medicine, and is a member of the staff supporting the Committee on Women in Science, Engineering, and Medicine (CWSEM), a standing committee of the National Academies. Currently, Benya serves as the Director of the Action Collaborative on Preventing Sexual Harassment in Higher Education. Recently, she served as the study director for the National Academies study “Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine.” Benya’s work focuses on ensuring that science, engineering, and medicine are ethical and socially responsible, both in their practice and in who gets to participate in the work. Before joining the CWSEM staff, Benya worked with the National Academy of Engineering on improving and enhancing engineering ethics education and on analyzing the pathways engineers take from education to the workforce.

Benya holds a B.A with honors in Science, Technology and Society from the University of Puget Sound, and a M.A. in Bioethics and Ph.D. in History of Science, Technology, and Medicine from the University of Minnesota. Her Ph.D. focused on the history of bioethics and discussions of scientific social responsibility during the 1960s and 1970s, which led to the creation of the first federal bioethics commission in 1974. Her M.A. examined different types of institutional methodologies for considering the social implications of science with a focus on those that integrate scientific research with ethics research in the United States and Canada. Benya was elected a Fellow of the American Association for the Advancement of Sciences in 2017.
MICHAEL COX

Michael Cox serves as the Global Head of Talent for Boeing. He is responsible for developing and executing Boeing’s talent strategy, including planning, forecasting, attraction, acquisition and management practices along with ensuring that Boeing has the data and insights to further its position as an industry leader and career destination for top talent globally. He is passionate about creating a diverse and inclusive workforce that ensures high-performance and the achievement of organization’s business objectives.

Michael’s career spans several global companies including Comcast, Walmart, eBay and Bank of America, in various disciplines in the field of Human Resources Management including HR business partnership, leadership development, compensation, performance management and inclusion. His career has taken him across the US and around the globe including an expat assignment in Sydney, Australia.

In addition to his role at Boeing, Michael currently serves on the Board of Directors for Out & Equal, an organization dedicated to ensuring workplace equality for the LGBTQ community. He is an avid hiker and cyclist. He has biked from San Francisco to Los Angeles 3 times and has raised over $100,000 in the fight to end the AIDS pandemic.

NORMAN L. FORTENBERRY

Norman L. Fortenberry is executive director of the American Society for Engineering Education (ASEE). The Executive Director of ASEE has the direct and full-time responsibility for executive and administrative management of the continuing operations and Headquarters functions of ASEE and serves as secretary to the Board of Directors. Fortenberry was appointed to his post in May 2011. ASEE is an international society of individual, institutional, and corporate members founded in 1893 and committed to promoting global excellence in engineering and engineering technology instruction, research, public service, professional practice, and societal awareness. Fortenberry was previously the founding director of the Center for the Advancement of Scholarship on Engineering Education (CASEE) at the National Academy of Engineering (NAE). CASEE was NAE’s first operating center, promoted research on teaching and learning and sought to translate research results into improved educational practices in pre-college, collegiate, and work-based settings. Prior to joining NAE, Fortenberry served senior advisor for policy, analysis, and planning to NSF’s assistant director for education and human resources. He concurrently served as director of the Division of Undergraduate Education (DUE) at the National Science Foundation (NSF). While serving as director of DUE, Fortenberry also served for 2 years as director of NSF’s division of Human Resource Development (HRD) – making him the first person to simultaneously serve as head of two separate NSF divisions. Before becoming a division director at NSF, Fortenberry served as Executive Director of the National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (The GEM Consortium), a national alliance of employers and universities dedicated to increasing the number and success of graduate
degree recipients in engineering and science drawn from underrepresented minority populations. Fortenberry began his career as a member of the mechanical engineering faculty at the Florida A&M University - Florida State University College of Engineering. Fortenberry is a fellow of ASEE and of the American Association for the Advancement of Science. Fortenberry is the author or co-author of more than 48 peer-reviewed publications and has written proposals for funded projects exceeding $16 million. He was awarded bachelor’s, master’s and doctoral degrees in mechanical engineering by the Massachusetts Institute of Technology.

JANE GOODYER

Jane Goodyer joined York University on October 1, 2018 to take up the position of Dean of the Lassonde School of Engineering. Previously, she was based at Massey University in New Zealand, where she was a professor and, since 2017, has served as Head of School in the School of Engineering and Advanced Technology. There, she led strategic planning initiatives to reposition organizational structures and teaching and research in the School, ultimately increasing enrolments and building stronger international collaborations.

Prior to this appointment, she served as the School’s Associate Dean for undergraduate teaching and learning, with responsibility for curriculum and student success and welfare, where she led a redesign of the curriculum, incorporating blended learning and project-based learning, resulting in improved student satisfaction and retention. Before her appointment at Massey University in 2006, she held an appointment at Coventry University in the U.K., as a manufacturing systems specialist, working with automotive businesses to apply cutting-edge research in advanced joining technologies for body-in- white manufacture.

CHRISSEY HOULAHAN

U.S. Representative Chrissy Houlahan is an Air Force veteran, engineer, entrepreneur, and educator who is continuing her career of service as the first woman ever to represent Pennsylvania’s 6th District in Congress.

Chrissy is the daughter and granddaughter of Holocaust survivors who came to America with nothing. She grew up in a military family; her parents met when her father and grandfather flew P3s in the same Navy squadron. She earned her engineering degree from Stanford with an ROTC scholarship that launched her service in the U.S. Air Force and Air Force Reserves, and later earned her M.S. in Technology and Policy from MIT.

Chrissy has helped lead several thriving Southeastern Pennsylvania companies including AND1, a basketball apparel company headquartered in Paoli, and B Lab, the organization that launched the B Corporation movement. She went on to serve in Teach for America as a chemistry teacher at Simon Gratz High School in North Philadelphia, and then led and scaled a non-profit helping thousands of underserved students all across America build their literacy skills.

These experiences helped shape her political vision of a great nation united by common values that leaves no one behind. She is committed to fighting for access to quality, affordable healthcare, common sense gun safety, government accountability and transparency, and working to build a strong, stable economy with good jobs and good benefits for everyone.

ANTHONY KOLIHA

Anthony Koliha is the Director of the Office of Global Educational Programs at the U.S. Department of State, where he oversees a portfolio of international teacher, professional, and global mobility programs and services. Prior to joining ECA, he was the Director of International Programs in the College of Arts and Sciences at Indiana University, Bloomington, where he helped successfully launch a new School of Global and International
Studies, in addition to expanding international programs and providing senior leadership for over a dozen federally-funded international, area studies, and foreign language centers. Koliha previously held joint posts as Director of the Fulbright Program in Russia and International Director of the Russia/Eurasia office for the Institute of International Education. Koliha has also worked at the Social Science Research Council and American Councils for International Education. He holds degrees from Kenyon College and Indiana University, Bloomington.

KAREN MARRONGELLE
Karen Marrongelle is the Assistant Director of the National Science Foundation (NSF) for Education and Human Resources (EHR). She leads the EHR directorate in supporting research that enhances learning and teaching to achieve excellence in U.S. science, technology, engineering and mathematics (STEM) education. Prior to joining NSF, Marrongelle was dean of the College of Liberal Arts and Sciences at Portland State University and Professor of Mathematics and Statistics, where she oversaw 24 departments and programs across the humanities, social sciences and natural sciences.

In addition to her work as dean, Marrongelle has served as a faculty member in the Department of Mathematics and Statistics at Portland State University since 2001. Prior to her appointment as dean, she held positions as the Vice Chancellor for Academic Strategies and Assistant Vice Chancellor for Academic Standards and Collaboration with the Oregon University System. From 2007-2009, Marrongelle served on a rotation as a program officer at NSF and led numerous grants, collaborating with researchers nationally and internationally to improve undergraduate mathematics education and K-12 mathematics professional development. Marrongelle has a bachelor’s degree in mathematics and philosophy from Albright College, a master’s degree in mathematics from Lehigh University and a doctorate in mathematics education from the University of New Hampshire.

MARK J. LEWIS
Mark J. Lewis has been the Director of Defense Research and Engineering for Modernization since November 2019. In this role he oversees efforts to advance critical technology areas including autonomy, biotechnology, cyber, directed energy, networked communications, hypersonics, microelectronics, quantum science, and space. Prior to this role at the Department of Defense (DOD), Lewis served as the Director of the IDA Science and Technology Policy Institute (STPI), a federally funded research and development center that provides analysis of national and international science and technology issues for federal agencies and the White House Office of Science and Technology Policy. Prior to taking charge of STPI, Lewis served as the Willis Young, Jr. Professor and Chair of the Department of Aerospace Engineering at the University of Maryland. A faculty member at Maryland for 24 years, Lewis taught and conducted basic and applied research. From 2004 to 2008, he was the Chief Scientist of the U.S. Air Force. From 2010 to 2011, he was President of the American Institute of Aeronautics and Astronautics (AIAA). Lewis also served as a member of the Air Staff and principal scientific adviser to the Chief of Staff and Secretary of the Air Force.

Lewis attended the Massachusetts Institute of Technology, where he received a Bachelor of Science degree in aeronautics and astronautics, Bachelor of Science degree in earth and planetary science (1984), and both a Master of Science degree (1985) and a Doctor of Science degree (1988) in aeronautics and astronautics. Lewis is the author of more than 300 technical publications and has been an adviser to more than 60 graduate students. He has also served on various advisory boards for NASA, the Defense Department, and the Air Force, including two terms on the Air Force Scientific Advisory Board. Lewis is a Fellow of the Royal Aeronautical Society, a Fellow of the American Society of Mechanical Engineers, and an Honorary Fellow of the AIAA. His awards include the DOD Exemplary Civilian Service Award, Meritorious Civilian Service Award, Exceptional Civilian Service Award, the IECEC/AIAA Lifetime Achievement Award, and the Air Force Association’s Theodore Von Karman Award. He was also recognized as an AIAA National Capital Young Scientist/Engineer of the Year (1994) and an Aviation Week Laureate (2007).
MARGARET MARTONOSI

Margaret Martonosi became the Assistant Director of the National Science Foundation (NSF) for Computer and Information Science and Engineering on February 1, 2020. In addition to her management experience in the computer and information science community and her research in computer architecture, Martonosi has been noted for her leadership in broadening participation in computer science education. Since 2017, she has served as director of the Keller Center for Innovation in Engineering Education at Princeton University while maintaining her role as a professor of computer science. Martonosi has also held leadership positions in numerous professional societies. CISE supports research in all areas of computer and information science and engineering, as well as advanced research cyberinfrastructure necessary for discovery in all science and engineering fields. Awards made by the directorate foster broad interdisciplinary collaboration, help develop and maintain cutting-edge national research computing infrastructure, and contribute to the development of a workforce with skills essential for success in the increasingly competitive global market.

Martonosi’s long-term research has been focused on computer architecture and mobile computing with an emphasis on power-efficiency. She was one of the architects of the Wattch power modeling infrastructure, a tool that was among the first to allow computer scientists to incorporate power consumption into early-stage computer systems design. Her work helped demonstrate that power needs can help dictate the design of computing systems. More recently, Martonosi’s work has also focused on architecture and compiler issues in quantum computing as well. She is an inventor who holds seven U.S. patents and has coauthored two technical reference books on power-aware computer architecture.

Martonosi has won numerous awards and honors, including a Jefferson Science Fellowship, the IEEE Technical Achievement Award, and the ACM SIGARCH Alan D. Berenbaum Distinguished Service Award, as well as numerous recognitions for her scholarship, teaching, and public service.

Martonosi received a bachelor’s degree in electrical engineering from Cornell University and master’s and doctoral degrees in electrical engineering from the Stanford University.

JAGADEESH PAMULAPATI

Jagadeesh Pamulapati is the Director of the Laboratories Office in the Office of the Assistant Secretary of Defense (Research and Engineering) (ASD(R&E)). Pamulapati is responsible for all matters associated with Department of Defense (DoD) laboratories that encompass a Defense Laboratory Enterprise and the approximately 39,000 scientists and engineers that work in the 63 Defense laboratories, warfare centers, and engineering centers across 22 states and the District of Columbia. In addition to laboratory matters, Pamulapati also leads the Science, Technology, Engineering, and Mathematics (STEM) Development Office within the DoD; ensures interchange with Allied friendly nations; and provides
advice and assistance in developing policies for rapid technology transition.

Pamulapati was selected for the Senior Executive Service in January 2016. Prior to this, Pamulapati was in the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) from June 2006. In this position, he was responsible for developing and implementing policy initiatives for the Army’s laboratories. He also fulfilled the role of the Executive Director for Strategic Plans and Program Planning, a Senior Executive Service position, where he was responsible for the Basic Research, Innovation Enablers, Manufacturing Technologies, Technology Wargaming, and International Portfolios. During his time with the Army, Pamulapati also served as a senior policy analyst within the White House Office of Science and Technology Policy, responsible for a broad portfolio of national security interest items; the Chief Scientist and Chief Technical Officer responsible for technology integration for the Army’s Future Combat Systems (FCS) program; the Army’s leading transformational initiative consisting of soldiers, manned and unmanned systems within a unifying network; and a scientific liaison to the Army Office of the Deputy Chief of Staff, G-8 where he provided technical expertise on science and technology issues.

Pamulapati began his distinguished career at the Army Research Laboratory (ARL) where he developed advance ultra-submicron high speed devices for next generation optoelectronic integrated circuits and monolithic millimeter wave integrated circuits, infrared materials for forward looking infrared imagers as well as high power infrared laser sources for countermeasure applications. Pamulapati received his B.S.E., M.S.E. and Ph.D. in Electrical Engineering from The University of Michigan, Ann Arbor. He holds eleven patents and has contributed to more than 40 archival journal publications and three books.

MIRIAM QUINTAL

Miriam Quintal, ASEE Washington Representative and Managing Principal at Lewis-Burke Associates, boasts a decade of advocacy and client success at Lewis-Burke, managing the federal relations portfolios for large academic institutions, scientific societies, and facility management organizations. Miriam leads Lewis-Burke’s efforts representing ASEE, promoting engineering education to Congressional and Federal
officials and helping to spur grassroots advocacy efforts by engineering deans and other constituent groups. 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.

**ALTON D. ROMIG, JR**

Alton D. Romig, Jr. is the executive officer of the National Academy of Engineering. Under Congressional charter, the Academy provides advice to the federal government, when requested, on matters of engineering and technology. As executive officer, Romig is the chief operating officer responsible for the program, financial, and membership operations of the Academy, reporting to the NAE president.

He was previously vice president and general manager of Lockheed Martin Aeronautics Company Advanced Development Programs, better known as the Skunk Works®. He spent the majority of his career at Sandia National Laboratories, operated by the Lockheed Martin Corporation, having joined Sandia as a member of the technical staff in 1979 and moved through a succession of R&D management positions leading to his appointment as executive vice president in 2005. He served as deputy laboratories director and chief operating officer until 2010, when he transferred to the Skunk Works.

Romig serves or has served on a number of Advisory Committees including those at Univ of Washington, MIT, Ohio State, Purdue, Georgia Tech, the Colorado School of Mines and Sandia National Laboratories. He is also visiting Associate of Applied Physics and Materials Science at Cal Tech. Romig is a member of the Board of Directors of Football Research, Inc., a non-profit entity created and supported by the National Football League to review engineering technology to improve the safety of the sport. From 2003 to 2008, he served on the Board of AWE, Aldermaston, UK and chaired the Program committee.

Romig is a Fellow TMS, IEEE, AIAA and AAAS. He is also a Fellow and Honorary Member of ASM International. Romig was
elected to the National Academy of Engineering in 2003 and the Council of Foreign Relations in 2008. He was awarded the ASM Silver Medal for Materials Research in 1988. Romig graduated from Lehigh University in 1975 with a BS in Materials Science and Engineering. He received his MS and PhD in Materials Science and Engineering from Lehigh University in 1977 and 1979, respectively.

NEIL G. RUIZ

Neil G. Ruiz is associate director of global migration and demography at Pew Research Center. He studies the international movement of people across borders, the impact of migration on sending and receiving countries, high-skilled immigration to the U.S., and comparative immigrant visa systems. Prior to joining the Center, Ruiz was the executive director of the Center for Law, Economics & Finance at George Washington University, and he has also worked as a migration expert at the Brookings Institution, the World Bank and the Asian Development Bank. He received his doctorate in political science with a specialization in political economy from the Massachusetts Institute of Technology and a master’s degree in economic history from Oxford University. Ruiz regularly speaks about U.S. immigration and international migration research with major print and broadcast media.

DAWN TILBURY

Dawn Tilbury leads NSF’s Directorate for Engineering in its mission to support engineering research and education critical to the nation’s future and foster innovations to benefit society. The Engineering Directorate provides about 32 percent of the federal funding for fundamental research in engineering at academic institutions, and distributes about 1,600 research awards each year. The Engineering Directorate also helps to advance NSF’s Ten Big Ideas, including the Future of Work at the Human-Technology Frontier, the Quantum Leap, and NSF INCLUDES.

A professor at the University of Michigan since 1995, in both mechanical and electrical engineering, Tilbury has a background in systems and control engineering. She is the inaugural chair of the Robotics Steering Committee and served as an associate dean for research in the College of Engineering. Tilbury retains her position with the University of Michigan, and shall return after her term with NSF expires. She holds a Masters and Ph.D. in Electrical Engineering and Computer Science from the University of California-Berkeley and a B.S. in electrical engineering from the University of Minnesota.

BRUCE WESTERMAN

U.S. Rep. Bruce Westerman is a Hot Springs native currently serving his third term as representative from the Fourth District of Arkansas, having first been elected in 2014. Westerman serves on the Committee on Natural Resources and the Committee on Transportation and Infrastructure, where he is Ranking Member of the Water Resources and Environment Subcommittee. Westerman also serves on the Minority Whip Team under the leadership of House Minority Whip Steve Scalise.

Prior to serving in Congress, Westerman was elected to two terms in the Arkansas General Assembly, where he was the state's first Republican House Majority Leader since Reconstruction following the 2013 GOP takeover of the Arkansas House of Representatives.

An engineer and forester by trade, Westerman worked for 22 years at Mid-South Engineering in Hot Springs. He was named Engineer of the Year by the Arkansas Society of Professional Engineers in 2013. A 1990 graduate of the University of Arkansas with a Bachelor of Science degree in Biological and Agricultural Engineering, Westerman was a four-year walk-on member of the Razorback football team. He was awarded the Outstanding Young Alumni Award in 2005 and the Distinguished Alumni Award in 2012. Westerman is also a graduate of Yale University, earning a Master of Forestry degree in 2001.