PROGRAM BOOK

2022 Engineering Deans Public Policy Colloquium Willard Intercontinental Hotel

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Washington, DC • February 7–9, 2022





ABOUT THE COLLOQUIUM

This year the PPC will focus on the themes of regional innovation and competitiveness. The US Congress and Biden Administration are poised to make major investments in critical technology areas focused on growing our talent base, broadening capacity, and advancing use-inspired research around the nation. As hubs for research and workforce development in their regions and nationally, schools and colleges of engineering are key players to make progress on these issues. Federal agency and thought leaders will join deans to discuss these issues and the ways that the federal government and efforts of engineering schools and colleges can together help build equitable and catalytic innovation ecosystems that enable our national competitiveness.

In addition to addressing these themes, deans will also hear from new leadership in the National Science Foundation's Directorate for Engineering and the leadership of the new Engineering Visioning Research Alliance. Together these sessions will give deans insights into a new vision for Engineering at NSF and how they can get involved in helping to shape future investments.

As part of the colloquium, we will come together to advocate for our critical priorities in funding and policy through possibly in person but mostly virtual congressional visits day on February 9th. To prepare for these visits, the meeting will include discussion of the outlook for engineering education and research in 2022 and congressional visits training.

PPC

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JoAnn Lighty, *Chair, Boise State University,* Public Policy Committee Chair

MONDAY, FEBRUARY 7, 2022

Starting at 3:00 p.m. Crystal Room Foyer	Registration
3:30 p.m 5:30 p.m. Crystal Room	 New Dean's Orientation This interactive orientation will feature: An introduction to ASEE, the Engineering Deans Council (EDC), and the Public Policy Colloquium (PPC) An overview of working with the federal government Advocating for research and higher education Deans will have a chance to share their interests and concerns about the federal government. The orientation will help new deans become familiar with key issues and the process of working with legislators and their staff. Deans who would like a refresher about these topics are welcome to attend as well. Speakers: Miriam Quintal and Amanda Bruno, Lewis-Burke Associates LLC Organizers: Hanchen Huang, University of North Texas JoAnn Lighty, Boise State University
1:00 p.m 4:00 p.m. Peacock Lounge	Provosts Meeting
6:00 p.m. – 7:30 p.m. Crystal Room	Opening Reception

TUESDAY, FEBRUARY 8, 2022

7:00 a.m 5:00 p.m. Ballroom Foyer	Registration
7:45 a.m 8:45 a.m. Willard Ballroom	Breakfast
8:45 a.m 9:00 a.m. Willard Ballroom	Welcome and Introduction
9:00 a.m 10:00 a.m. Willard Ballroom	 Session 1 - Lewis-Burke Washington Update Speaker: Miriam Quintal, ASEE Washington Representative and Managing Principal, Lewis-Burke Associates LLC ASEE's federal relations partner, Lewis-Burke Associates LLC, will discuss the current state of play in Washington and the outlook for ASEE's 2022 advocacy priorities, including: The political outlook for the 2022 midterm elections Funding for research and education Biden Administration priorities Higher education and STEM policy Immigration policy
10:00 a.m. – 10:30 a.m. Crystal Room	Refreshment Break

TUESDAY, FEBRUARY 8, 2022

10:30 a.m 12:00 a.m. Willard Ballroom	Session 2- Geography of Innovation and Workforce Development
	The Biden Administration and Congress have placed a major priority on broadening the geography of innovation and catalyzing economic growth across the country through partnerships between universities, industry, and regional stakeholders. This session will explore the role of workforce development in these priorities and in upcoming programs such as Regional Technology Hubs that are under consideration by Congress.
	<u>Speakers:</u>
	Alejandra Castillo, <i>Assistant Secretary of Commerce for Economic Development, Department of Commerce</i>
	Mark Muro, Senior Fellow and Policy Director at Brookings Metro, Brookings Institution
	Jedidah Isler, Assistant Director for STEM Opportunity and Engagement, White House Office of Science and Technology Policy
	<u>Moderator:</u>
	James Martin, University of Pittsburgh
	<u>Organizers:</u>
	James Martin, University of Pittsburgh
	Sam Easterling, Iowa State University
	Sheryl Ehrman, San Jose State University
	Amanda Bruno, Lewis-Burke Associates LLC
12 noon – 1:15 p.m. Willard Ballroom	Lunch

TUESDAY, FEBRUARY 8, 2022	
1:15 p.m 2:00 p.m. Willard Ballroom	Session 3 – Introduction to the Engineering Research Visioning Alliance
	The National Science Foundation recently funded a new organization to provide input from the engineering community about priority research areas for the NSF Directorate of Engineering. Dorota Grejner-Brzezinska will talk about the alliance and how deans can get involved.
	<u>Speaker:</u>
	Dorota A. Grejner-Brzezinska, Lowber B. Strange Endowed, Chair in Engineering and Interim Vice President for Knowledge Enterprise, Ohio State University
	<u>Moderator:</u>
	Jayathi Murthy, University of California, Los Angeles
	<u>Organizer:</u>
	Vijay Kumar, University of Pennsylvania
2:00 p.m. – 2:45 p.m. Willard Ballroom	Preparation for Congressional Visits
	<u>Speaker:</u>
	Miriam Quintal, <i>ASEE Washington Representative and Managing</i> <i>Principal, Lewis-Burke Associates LLC</i>
	In this session, Lewis-Burke Associates will discuss how to use Wednesday's congressional visits to advance ASEE's policy goals and will provide an overview of the talking points and materials for these meetings. The session will also explore best practices for conducting virtual congressional meetings and how to prepare your group.

Refreshment Break

TUESDAY, FEBRUARY 8, 2022

3:00 p.m. – 4:30 p.m. Willard Ballroom	Session 4 - New Modes of Agency Funding
	Congress and the Biden Administration are exploring new agency structures to pursue use-inspired research and focus more efforts on high-risk, high-reward technology development. These efforts include the new directorate for Technology, Innovation, and Partnerships at the National Science Foundation and a new Advanced Research Projects Agency for Health in the Department of Health and Human Services.
	Speakers will discuss the impetus and planning for these new entities and how they fit into overall Biden Administration priorities.
	Speakers:
	Erwin Gianchandani, Senior Advisor for Translation, Innovation, and Partnerships, National Science Foundation
	Kei Koizumi, <i>Principal Deputy Director for Policy, White House Office of Science and Technology Policy</i>
	Tara Schwetz, Acting Principal Deputy Director, National Institutes of Health
	<u>Moderator:</u>
	J. Cole Smith, Syracuse University
	<u>Organizers:</u>
	Alex Wolf, University of California Santa Cruz
	J. Cole Smith, Syracuse University
	Wendi Heinzelman, University of Rochester
	Paul Tikalsky, Oklahoma State University
	Miriam Quintal and Mia Luckett, Lewis-Burke Associates LLC

4:30 p.m 5:30 p.m. Willard Ballroom	Session 5- Susan Margulies, NSF Assistant Director for Engineering
	Susan Margulies became the NSF Assistant Director for Engineering in 2021. She will discuss her vision for NSF Engineering and new initiatives.
	Moderator:
	JoAnn Lighty, Boise State University
	<u>Organizer</u>
	Miriam Quintal, Lewis-Burke Associates LLC
6:00 p.m. – 7:30 p.m. Round Robin Bar	Closing Reception
	<u>Speaker:</u>
	Dr. Norman L. Fortenberry, Executive Director, ASEE

WEDNESDAY, FEBRUARY 9, 2022

All Day	Group Meetings with Members of Congress and Staff
	Participants are encouraged to conduct virtual or in-person congressional visits in state groups. Please note that deans are responsible for making their own arrangements for congressional visits.
	Lewis-Burke Associates will be coordinating federal relations representatives 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 with your state group, please contact mia@lewis-burke.com for assistance.
	The PPC Planning Committee does not arrange for individual congressional meetings

2022 PPC SPEAKERS BIOGRAPHIES

AMANDA BRUNO



Amanda Bruno is a Senior Associate at Lewis-Burke Associates LLC with issue expertise in education policy, workforce issues,

engineering, emerging technologies, transportation policy. economic development, and international affairs. Amanda advises Lewis-Burke clients on federal activities that impact education, immigration, economic development, and workforce policy. She provides strategic guidance on upcoming research opportunities and potential congressional action in these key areas. Amanda previously served as a Government Affairs Associate in The Ohio State University's Office of Federal Relations in Washington, D.C. where her portfolio covered higher education issues and administrative functions. Amanda's previous work in the higher education community brings an important perspective to Lewis-Burke. Amanda holds bachelor's degrees in political science and international studies from Miami University, where she graduated summa cum laude. Amanda is currently pursuing a master's in public policy from George Mason University.

ALEJANDRA Y. CASTILLO



Alejandra Y. Castillo was sworn in as U.S. Assistant Secretary of Commerce for Economic Development on August 13, 2021.

She has served in leadership positions for three presidents -Biden, Obama and Clinton. Her professional career spans two decades, focusing on creating equitable and inclusive opportunities for all Americans.

Prior to EDA, Castillo was the Chief Executive Officer of YWCA USA, where she championed the 163-year-old organization delivering critical social, educational, and economic development services throughout its 204 associations.

In 2014. Castillo was appointed by President Obama to serve as the national director of the Commerce Department's Minority Business Development Agency (MBDA), becoming the first Hispanic woman to lead the agency. During her tenure, she led MBDA's efforts to boost the growth and global competitiveness of minority business enterprises (MBEs). Under her leadership, MBDA expanded its effort to help MBEs gain access to capital, contracts, and business opportunities, assisting MBEs in growing in size and scale.

Castillo first joined the Department of Commerce in 2008 as a Special Advisor to the Under Secretary for the U.S. Department of Commerce's International Trade Administration (ITA). Additionally, Castillo served as a Senior Policy Analyst in the White House during the Clinton Administration.

She holds a bachelor's degree in Economics and Political Science from the State University of New York at Stony Brook, a master's degree in public affairs from the LBJ School at the University of Texas at Austin, and earned a Juris Doctor degree from American University's Washington College of Law.

DR. JEDIDAH ISLER



Dr. Jedidah Isler serves the White House Office of Science and Technology Policy (OSTP) as the Assistant Director of Science, Technology,

Engineering, and Mathematics (STEM) Opportunity and Engagement within the Science and Society Division. Dr. Isler is a renowned astrophysicist and was a member of the NASA review team for the Biden-Harris transition team. She previously worked as an assistant professor of astrophysics at Dartmouth College and was the first African American woman to receive her Ph.D. in astrophysics from Yale University. Dr. Isler's research, which focuses on the physics of blazars, has been supported by numerous fellowships with NSF, NASA, and the Ford Foundation. Dr. Isler is a 2015 TED fellow and a 2017 senior TED fellow. She is an outspoken advocate for diversity, equity and inclusion in STEM, a cause her non-profit organization. The STEM en Route to Change (SeRCH) Foundation, Inc. is dedicated to. Dr. Isler also served as a co-organizer of the NSFfunded Inclusive Astronomy conference and serves on the American Institute of Physics TEAM-UP Task Force. Dr. Isler is an alumna of the Norfolk State University Dozoretz National Institute for Mathematics and Applied Sciences (DNIMAS) and the Fisk-Vanderbilt Bridge Program.

2022 PPC SPEAKERS BIOGRAPHIES

ERWIN GIANCHANDANI



Dr. Erwin Gianchandani serves the National Science Foundation (NSF) as the Senior Advisor to the Director for

Technology, Innovation, and Partnerships, where he is helping spearhead the planning for the new Directorate for Technology. Innovation, and Partnerships (TIP). Dr. Gianchandani previously served as the Deputy Assistant Director for Computer and Information Science and Engineering (CISE). As Deputy Assistant Director, Dr. Gianchandani spearheaded several new NSF investment areas, such as the Smart and Connected Communities and Platforms for Advanced Wireless Research programs. Dr. Gianchandani has also served NSF CISE as Deputy Division Director of the Computer and Network Systems (CNS). Before joining NSF, Dr. Gianchandani served as the inaugural Director of the Computing Community Consortium (CCC) and the Director of Innovation Networking at the University of Virginia. Dr. Gianchandani holds a B.S. in computer science and an M.S. and Ph.D. in biomedical engineering from the University of Virginia.

DOROTA A. GREJNER-BRZEZINSKA



Dorota A. Grejner-Brzezinska is the University Distinguished Professor, Lowber B. Strange Endowed Chair

and Professor in the Department of Civil, Environmental and Geodetic Engineering. She is the

Interim Vice President for Knowledge Enterprise in The Ohio State University (OSU) Enterprise for Research, Innovation and Knowledge. She is also a Director of the Satellite Positioning and Inertial Navigation (SPIN) Laboratory. Her research interests cover GPS/GNSS algorithms, GNSS/inertial and other sensor integration for navigation in GNSSchallenged environments, sensors and algorithms for indoor and personal navigation, image-based navigation using artificial intelligence (AI) methods, and mobile mapping.

Dr. Brzezinska is a member of the National Academy of Engineering (NAE). Fellow of the Institute of Navigation (ION), Fellow of the Royal Institute of Navigation (RIN), and the recipient of the 2016 ION Johannes Kepler Award. the 2005 ION Thomas Thurlow Award, the 2005 and 2015 United States Geospatial Information Foundation (USGIF) Academic Research Award, and the 2018 International Association of the Institutes of Navigation (IAIN) John Harrison Award. She has served as President of the Institute of Navigation (2015-2017), and the International Association of Geodesy (IAG) Commission 4, Positioning and Applications (2011-2015), and is an IAG Fellow. Dr. Brzezinska currently serves as Principal Investigator for the NSF Engineering Research Visioning Alliance (ERVA) and is a member of the National Space-Based Positioning, Navigation, and Timing (PNT) Advisory Board, and served on the U.S. President's Council of Advisors on Science and Technology (PCAST).

Dr. Brzezinska holds an M.S. and a Ph.D. in Geodetic Science from The Ohio State University, and an M.S. in Surveying Engineering and Land Management Systems from the University of Warmia and Mazury, Poland.

KEI KOIZUMI



Kei Kolzumi is the Deputy Director of Policy for the Office of Science and Technology Policy (OSTP). OSTP leads the federal

government in its efforts to implement effective science and technology policy and assist the Office of Management and Budget (OMB), as well as the president, with analyzing research and development in policies, programs, plans and budgets. Mr. Koizumi also served in OSTP during the Obama Administration. In his current role. Mr. Koizumi works to formulate, implement, and coordinate federal R&D policy in collaboration with other OSTP staff. Before working as Deputy Director, Koizumi served as the Chief of Staff for OSTP Director Eric Lander. Mr. Koizumi previously worked as a Senior Advisor in Science Policy at the American Association for the Advancement of Science (AAAS). where he also worked as the

Director for the R&D Budget and Policy program. Mr. Koizumi holds a B.A. in comparative political economics from Boston University and an M.A. in international science and technology policy from the George Washington University.

SUSAN MARGULIES



Dr. Susan Margulies is the head of the National Science Foundation's (NSF) Directorate for Engineering (ENG). As Director, Dr.

Margulies leads ENG in their work to further engineering education and the engineering workforce through programs, centers, and partnerships. As the agency's first biomedical engineer to lead the Directorate, Dr. Margulies seeks to expand on ENG's mission through national and international partnerships with industry, other agencies, academia, institutions, and engineering communities. Prior to working with NSF ENG, Dr. Margulies served as the chair of the Wallace H. Coulter Department of Biomedical Engineering at the Georgia Institute of Technology. She also taught as a professor of biomedical engineering at Emory University, and of bioengineering and neurosurgery at the University of Pennsylvania. Dr. Margulies holds a BSE in mechanical and aerospace engineering from Princeton University and master's and doctoral degrees in bioengineering from the University of Pennsylvania.

MARK MURO



Mark Muro is a Senior Fellow and Policy Director at the Brookings Institution Metropolitan Policy Program, where he leads

the economy activities focused on regional technology, economic development, and digitalization. As a policy expert, Mr. Muro focuses on digital trends, automation, advanced industries, and regional development issues. His most recent work has focused on the effect automation and artificial intelligence has had on creating "advanced economy that works for all". He has also published work on the "geography of the digital economy" which analyzes the effects of the "COVID recession", and differences in economic development between affluent cities and "places left behind". Mr. Muro holds a bachelor's degree from Harvard College and a master's degree in american studies from the University of California, Berkeley.

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. As Managing Principal, she oversees the firm's client engagement and issue practices to ensure success and advancement across the firm. Miriam fiercely protects client priorities, leveraging her unique combination of scientific training with political insight.

Miriam is a prominent leader in National Science Foundation advocacy, co-chairing the Coalition

for National Science Funding (CNSF) and working closely with the higher education and research advocacy community to guide policy for and champion the Foundation. 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. Major advocacy efforts have included 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 holds a bachelor's degree in chemistry from Smith College and a master's degree in organic chemistry from Harvard University.

2022 PPC SPEAKERS BIOGRAPHIES



Dr. Tara Schwetz is the Acting Principal Deputy Director of the National Institutes of Health (NIH). Dr. Schwetz recently served

the White House Office of Science and Technology Policy (OSTP) as the Assistant Director for **Biomedical Science Initiatives**, where she led the planning process for the Advanced Research Projects Agency for Health (ARPA-H). Dr. Schwetz has previously served NIH in various roles and capacities across the Institutes including as the Associate Deputy Director of NIH, the Alternate Deputy Ethics Counselor for NIH, and Senior Advisor to the Principal Deputy Director of NIH. Dr. Schwetz began her career at NIH as an American Association for the Advancement of Science (AAAS) Technology Policy Fellow at the National Institute of Nursing Research (NINR). Dr. Schwetz has spearheaded several high-level, NIH-wide efforts including two Rapid Acceleration of Diagnostics programs (RADx Underserved Populations and RADx Radical), the Implementing a Maternal health and Pregnancy Outcomes Vision for Everyone (IMPROVE) initiative, and the NIH-wide COVID-19 Strategic Plan. Dr. Schwetz received a B.S. in biochemistry with honors from Florida State University and a Ph.D. in biophysics from the University of South Florida, followed by a postdoctoral fellowship at Vanderbilt University.



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