

# 2023

## ASEE Research Leadership Institute

# RLI

March 6 -7, 2023  
Location

## PROGRAM BOOK

# ABOUT THE RESEARCH LEADERSHIP INSTITUTE

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## Conference Goals:

The ASEE Engineering Research Council (ERC) will be hosting the annual Research Leadership Institute (RLI) at the Westin Arlington Gateway Hotel from March 21-23. Formerly known as the ERC Annual Meeting, the RLI focuses on leadership and capacity building for all associate deans of research across all disciplines. Topics change annually in response to national trends and areas of interest with a good mix of interactive table discussions, panel discussions and presentations. This year we're planning sessions on foreign influence, the federal funding outlook and how academic institutions can respond, Research Centers, Emerging Research Areas, how to support convergent/interdisciplinary research, and a special session that will take a "deep dive" on difficult issues. Sessions begin Monday afternoon and continue through Wednesday morning, allowing time for participants to schedule Wednesday afternoon meetings with federal program managers or colleagues in the DC area. There will be breakout networking dinners on Monday evening and a conference dinner on Tuesday evening, including an after-dinner fireside chat with a national leader.

This learning opportunity is designed to be of value to Associate Deans of Research and those in Research leadership roles across disciplines, and we encourage ERC members to share broadly with others at their university. ERC membership is not required for attendance.



# ENGINEERING RESEARCH COUNCIL BOARD OF DIRECTORS

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# MONDAY, MARCH 21

<b>9:00 a.m. – 5:00 p.m.</b> F. Scott Fitzgerald Pre-Function	<b>Registration</b>
<b>10:00 a.m. – 11:00 a.m.</b> F. Scott Fitzgerald Ballroom CDE	<b>ADR Bootcamp and Networking with ERC Board Members</b> <p>This first-of-its-kind RLI session will provide practical guidance and useful insights for navigating and succeeding at the many services that ADRs perform on behalf of their college/school and institution. It will frame the structure of these roles and how they fit in the campus research ecosystem, with emphasis on creating synergies across colleges, centers/institutes, and support units and advancing research development and discovery. Although the session is primarily intended for ADRs in their first few years of service, the program should be of benefit to anyone who supports the diverse needs of faculty within a research context.</p> <p><b>Forrest Masters, <i>University of Florida</i></b></p>
<b>11:30 a.m. – 1:00 p.m.</b> Ernest Hemmingway Salon 1	<b>ERC Board Meeting and Lunch</b>
<b>1:00 p.m. – 1:10 p.m.</b> F. Scott Fitzgerald Ballroom CDE	<b>Welcome and Introductions</b> <b>Chuck Bunting, <i>Oklahoma State University</i></b>

# MONDAY, MARCH 21

<p><b>1:10 p.m. – 2:30 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Undergraduate Research to Strengthen Pipeline to Graduate School</b></p> <p>This session will explore examples of successful engagement of undergraduates in research. Following opening remarks to set the framework, the panelists' presentations will highlight undergraduate research implementations at their institutions. Table discussions will focus on application within the experiences of attendees followed by a report out to the group to highlight key ideas.</p> <p><b><u>Moderators:</u></b></p> <p><b>Chuck Bunting</b>, <i>Oklahoma State University</i> <b>Kimberly Jones</b>, <i>Howard University</i></p> <p><b><u>Panelists:</u></b></p> <p><b>Kenneth W. Van Treuren</b>, <i>Baylor University</i> <b>Liping Liu</b>, <i>Lawrence Technological University</i></p>
<p><b>2:30 p.m. – 3:00 p.m.</b></p> <p>F. Scott Fitzgerald Pre-Function</p>	<p><b>Refreshment Break</b></p>
<p><b>3:00 p.m. – 4:00 p.m</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Peer-to-Peer Networking</b></p> <p>Participants will be asked to rearrange themselves at tables in the room populated as follows: attendees who are relatively new to their current role (0-2 years in the position), who have 2-4 years' experience, and who have more than 4 years' experience. For the first 30 minutes, the table groups will discuss 3 specified topics (for 10 minutes each) that came out of the survey conducted at a recent RLI meeting. For the second 30 minutes, each participant at a table (starting with the newer and less experienced) will be asked to identify a research leadership issue related to their specific job that they feel is very important and would like to learn more about. The other participants at the table will then take turns presenting how this issue is dealt with at their institution.</p> <p><b><u>Moderators:</u></b></p> <p><b>Harley T. Johnson</b>, <i>University of Illinois at Urbana-Champaign</i> <b>John P. Coulter</b>, <i>Lehigh University</i></p>

# MONDAY, MARCH 21

<p><b>4:00 p.m. – 5:00 p.m.</b> F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Research Matching Fund Administration: Practices and Processes</b></p> <p>The session will start with a presentation of results from a pre-conference survey of RLI attendees related to matching fund administration practices. Attendees will next be broken up into table discussion groups based on home institution characteristics. Each table will be provided with a set of relevant questions to kick-start the sharing of matching fund administration practices and processes. With this sharing among like institutions serving as the primary goal, there will not be a report-out period at the end of the session.</p> <p><b><u>Moderators:</u></b></p> <p><b>Joe Konstan</b>, <i>University of Minnesota</i> <b>John Coulter</b>, <i>Lehigh University</i></p>
<p><b>5:30 p.m. – 6:30 p.m.</b> F. Scott Fitzgerald Pre-Function</p>	<p><b>Reception</b></p>
<p><b>6:45 p.m.</b></p>	<p><b>No Host Dinners at a Variety of Local Restaurants</b></p> <p>We have made reservations at a variety of restaurants that are within walking distance of the Westin Arlington. These networking dinner groups are offered to promote greater interaction among meeting participants. (Note: these are “no-host,” meaning that everyone is expected to pay for their own meal at this event.)</p> <p>Please go to <a href="https://www.signupgenius.com/go/10COF4AADA62EA6FAC07-2022">https://www.signupgenius.com/go/10COF4AADA62EA6FAC07-2022</a> to pick a venue of your choice and join your RLI colleagues for dinner and conversation.</p>

# TUESDAY, MARCH 22

<b>Starting at 7:30 a.m.</b> F. Scott Fitzgerald Pre-Function	<b>Registration</b>
<b>7:30 a.m. - 8:00 a.m.</b> F. Scott Fitzgerald Pre-Function	<b>Continental Breakfast</b>
<b>8:00 a.m. - 8:05 a.m.</b> F. Scott Fitzgerald Ballroom CDE	<b>Day 2 Welcome and Announcements</b> <b>Chuck Bunting</b> , <i>Oklahoma State University</i>
<b>8:05 a.m. - 9:05 a.m.</b> F. Scott Fitzgerald Ballroom CDE	<b>Supporting Convergent and Interdisciplinary Research</b> <p>The session will start with brief moderator presentations of example initiatives focused on advancing convergent and interdisciplinary research. Table discussions will follow, focused on the sharing of ideas from and practices at the institutions represented at the meeting. At the end of the session each table will be asked to share a single example on enhancing team science-oriented research with the entire group.</p> <p><b><u>Moderators:</u></b></p> <p><b>John Coulter</b>, <i>Lehigh University</i> <b>Lawrence Hornak</b>, <i>University of Georgia</i></p>

# TUESDAY, MARCH 22

<p><b>9:05 a.m. - 9:30 a.m.</b></p> <p>F. Scott Fitzgerald Pre-Function</p>	<p><b>Refreshment Break</b></p>
<p><b>9:30 a.m. - 11:00 a.m.</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Research Centers: A 360-Degree View</b></p> <p>This panel includes major center directors, an NSF program manager, and a representative from a DC consulting firm. Panelists will be asked questions by moderators. After the moderated Q&amp;A, the audience will be invited to ask additional questions.</p> <p><b><u>Moderators:</u></b></p> <p><b>Joseph Konstan</b>, <i>University of Minnesota</i></p> <p><b>Harley T. Johnson</b>, <i>University of Illinois at Urbana-Champaign</i></p> <p><b><u>Speakers:</u></b></p> <p><b>Deborah Jackson</b>; <i>Program Manager, Engineering Research Centers, NSF</i></p> <p><b>Danda Rawat</b>; <i>Director of DoD Center of Excellence in AI/ML, Howard University</i></p> <p><b>Thomas Russell</b>; <i>Senior Policy Advisor, Lewis-Burke Associates, LLC</i></p> <p><b>Ankur Srivastava</b>; <i>Director, Institute for Systems Research, University of Maryland</i></p>



# TUESDAY, MARCH 22

<p><b>11:00 a.m. - 12:00 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Training Grants</b></p> <p>This session focuses on training grants: What are they? How can they be used to support a robust, interdisciplinary research program? How can our faculty write competitive training grant proposals? The panel includes an NSF NRT program manager, an NIH T32 program manager, and an NSF NRT PI. Panelists will each give a short overview and share their unique perspectives. After a moderated Q&amp;A, the audience will be invited to pose additional questions.</p> <p><b><u>Moderators:</u></b></p> <p><b>Lawrence Hornak</b>, <i>University of Georgia</i></p> <p><b><u>Speakers:</u></b></p> <p><b>Patrick Brown</b>; <i>Program Manager, Division of Training, Workforce Development, and Diversity, NIH</i></p> <p><b>Vinod Lohani</b>; <i>Program Director, Division of Graduate Education, NSF</i></p> <p><b>Harley Johnson</b>; <i>Professor and Associate Dean for Research, University of Illinois</i></p>
<p><b>12:00 p.m. - 1:15 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom AB</p>	<p><b>Luncheon and ASEE Engineering Research Council Business Meeting (all are welcome)</b></p> <p><b>Chuck Bunting</b>, <i>Oklahoma State University</i></p>

# TUESDAY, MARCH 22

<p><b>1:30 p.m. – 3:00 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Federal Budget Outlook</b></p> <p>This session's speaker is well-known to the ERC community and has been providing this assessment of the federal budget at the RLI for several years. He will present for 30–35 minutes and there will be a moderated Q&amp;A session. The audience will be given the opportunity to submit questions in advance as well as to pose them at the session.</p> <p><b><u>Moderators:</u></b></p> <p><b>Carrie Berger</b>, <i>Purdue Polytechnic</i> <b>Vahid Motevalli</b>, <i>Penn State Harrisburg</i></p> <p><b><u>Speaker:</u></b></p> <p><b>Matt Hourihan</b>, <i>Director of R&amp;D Budget and Policy, AAAS</i></p>
<p><b>3:00 p.m. – 3:30 p.m.</b></p> <p>F. Scott Fitzgerald Pre-Function</p>	<p><b>Refreshment Break</b></p>
<p><b>3:30 p.m. – 4:30 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Current and Emerging Federal Research Initiatives</b></p> <p>Each panelist will address the emerging organization within their agency in a brief presentation. The audience will provide questions in advance, which will be posed to the panelists. There will be a general questions and answers period at the end of the session.</p> <p><b><u>Moderators:</u></b></p> <p><b>Forrest Masters</b>, <i>University of Florida</i> <b>Vahid Motevalli</b>, <i>Penn State Harrisburg</i></p> <p><b><u>Speakers:</u></b></p> <p><b>Tara A. Schwetz</b>, <i>Acting Principal Deputy Director, NIH</i> <b>Stephen Binkley</b>, <i>Acting Director, Office of Science, DOE</i></p>

# TUESDAY, MARCH 22

<p><b>4:30 p.m. – 5:30 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom CDE</p>	<p><b>NSF Convergence Accelerator and TIP</b></p> <p>Each speaker will provide up-to-date information about the NSF Convergence Accelerator and NSF Directorate for Technology, Innovation, and Partnerships (TIP). There will be a general questions and answers period at the end of the session.</p> <p><b><u>Moderators:</u></b></p> <p><b>Carrie Berger</b>, <i>Purdue Polytechnic</i> <b>Kimberly Jones</b>, <i>Howard University</i></p> <p><b><u>Speakers:</u></b></p> <p><b>Miriam Quintal</b>; <i>Managing Principal, Lewis-Burke Associates</i> <b>Doug Maughan</b>; <i>Office Head, NSF Convergence Accelerator, National Science Foundation</i></p>
<p><b>7:00 p.m. – 9:00 p.m.</b></p> <p>F. Scott Fitzgerald Ballroom AB</p>	<p><b>ERC Dinner – Fireside Chat</b></p> <p>This year our fireside chat guest is Dr. Charles Johnson-Bey, Senior Vice President at Booz Allen Hamilton. Dr. Johnson-Bey is currently serving on the Executive Committee for the NSF Engineering Research Visioning Alliance; he will be discussing ERVA’s vision and challenging research leaders throughout the country to contribute to achieving its mission.</p> <p>The ERC chair, Chuck Bunting, will begin by asking a few initial “fireside-like” questions to establish a rhythm and cadence, and then open the floor to questions from the group.</p>

# WEDNESDAY, MARCH 23

<b>Starting at 7:30 a.m.</b> F. Scott Fitzgerald Pre-Function	<b>Registration</b>
<b>7:30 a.m. - 8:00 a.m.</b> F. Scott Fitzgerald Pre-Function	<b>Continental Breakfast</b>
<b>8:00 a.m. - 10:30 a.m.</b> F. Scott Fitzgerald Ballroom CDE	<b>Foreign Influence: Balancing Open Science with Security</b>  Each speaker will provide up-to-date information and best practices related to foreign influence—in particular, the need for universities to balance open science with security. This will be followed by a general questions and answers period. The session will pivot to table-guided discussions and report out.  <b>Moderators:</b>  <b>Carrie Berger</b> , <i>Purdue Polytechnic</i> <b>Chuck Bunting</b> , <i>Oklahoma State University</i>  <b>Speakers:</b>  <b>Allison Lerner</b> ; <i>Inspector General, National Science Foundation; Chair, Council of the Inspectors General on Integrity and Efficiency, National Science Foundation</i> <b>Candice Wright</b> ; <i>Director, Science, Technology Assessment, and Analytics, U.S. Government Accountability Office</i>
<b>10:30 a.m. - 10:45 a.m.</b> F. Scott Fitzgerald Pre-Function	<b>Refreshment Break</b>

# WEDNESDAY, MARCH 23

<p><b>10:45 a.m. - 11:50 a.m.</b> F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Challenging Issue Deep Dive</b></p> <p>Attendees will contribute their challenge topics to a Google document advertised throughout the first two days of the RLI. A condensed list of topics will be used to guide table discussions.</p> <p><b><u>Moderators:</u></b></p> <p><b>Larry Hornak</b>, <i>University of Georgia</i></p> <p><b>Forrest Masters</b>, <i>University of Florida</i></p>
<p><b>11:50 a.m. - 12:00 p.m.</b> F. Scott Fitzgerald Ballroom CDE</p>	<p><b>Closing Remarks and Adjournment</b></p> <p><b>Chuck Bunting</b>, <i>Oklahoma State University</i></p>

# SPEAKERS

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## Allison C. Lerner

*Inspector General, National Science Foundation  
Chair, Council of the Inspectors General on  
Integrity and Efficiency*

Allison C. Lerner assumed the duties as Inspector General of the National Science Foundation (NSF) in April 2009, reporting to the National Science Board and the Congress. As head of the Office of Inspector General, she recommends policies for promoting economy, efficiency and effectiveness of NSF programs and operations. She leads efforts to prevent and detect fraud, waste, and abuse; improve the integrity of NSF programs and operations; and investigate allegations of misconduct in science.

Ms. Lerner has chaired the Council of the Inspectors General on Integrity and Efficiency since January 2021 and served as its vice chair from January 2015 through December 2020.

Ms. Lerner began her federal career in 1991, joining the Office of Inspector General at Commerce as assistant counsel, and has been a member of the senior executive service since 2005. During her tenure at Commerce, she served as special assistant to the IG, Deputy Assistant Inspector General for Auditing, and Acting Assistant Inspector General for Auditing. Prior to joining the federal government, she was an associate at a law firm in San Antonio, Texas.

Ms. Lerner has been honored by the President's Council on Integrity and Efficiency (PCIE) with three awards for excellence: in 2001, for her work reviewing the Department of Commerce's management of 5,000 intra-agency and special agreements worth over \$1 billion; in 2002, for her assistance in a complex investigation of false claims submitted under a financial award from the National Institute of Standards and Technology; and in 2005, for her review of a controversial study that recommended significant structural changes to the National Oceanic and Atmospheric Administration's Office of Finance and Administrative Services. In June 2011, Ms. Lerner was designated by President Obama as a member of the Government Accountability and Transparency Board.

Ms. Lerner received her law degree from the University of Texas School of Law and a B.A. in liberal arts from the University of Texas. She is admitted to the bar in both Texas and the District of Columbia.

## Ankur Srivastava

Ankur Srivastava is Professor of Electrical and Computer Engineering and Director of the Institute for Systems Research at the University of Maryland. He is an expert in high performance, low power, and secure electronic systems.

## Candice Wright

*Director, Science, Technology Assessment,  
and Analytics*

Candice Wright is a Director in GAO's Science, Technology Assessment, and Analytics team. She oversees GAO's work on federally funded research, intellectual property protection and management, and federal efforts to help commercialize innovative technologies and enhance U.S. economic competitiveness.

Candice joined GAO in July 2004. She has led engagements examining federal contracting, risks to the defense supplier base, foreign military sales, and homeland security. In 2011, she served on a congressional detail to the Senate Permanent Subcommittee on Investigations. Candice also served as the head of GAO's office in Kabul, Afghanistan.

Candice earned a master's degree in public policy from Carnegie Mellon University, and a bachelor's degree in management from Bentley College.

## Dr. Charles Johnson-Bey

Dr. Johnson-Bey has demonstrated experience in leading global innovation to reflect evolving markets and technology dynamics. He uniquely leverages the intersection of technology, strategy, and business to create & capture value, lead change and drive execution. His expertise has spanned academia as well as the commercial and defense industries.

As a Senior Vice President for Booz Allen, his responsibilities are to develop and execute innovative technology strategies that position Booz Allen as a leader in the development of next-generation solutions that are recognizable and branded in the market. He inspires leaders, promotes innovation, collaboration and sharing of

# SPEAKERS

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intellectual capital that empower people to change the world.

Dr. Johnson-Bey has over 25 years of engineering experience that includes emerging technologies in Information Warfare, the Electromagnetic Spectrum, Cyber Resilience, Digital Signal Processing, System Architecture, Prototyping, and Hardware. He has worked for Lockheed Martin Corporation, Motorola Corporate Research Labs, Corning Incorporated Science & Technology Division, and he was an Electrical Engineering professor at Morgan State University.

He is a graduate of the Baltimore Polytechnic Institute, the engineering high school in Baltimore, MD. Dr. Johnson-Bey received a BS degree in Electrical & Computer Engineering from the Johns Hopkins University and received both a MS and PhD in Electrical Engineering from the University of Delaware.


Dr. Johnson-Bey received the 2018 Black Engineer of the Year Award for Career Achievement for Industry. He received the Distinguished Alumni Award from Baltimore Polytechnic Institute. He is on several Boards including, the Whiting School of Engineering Advisory Board at The Johns Hopkins University and the Electrical and Computer Engineering Advisory Boards at both The Johns Hopkins University and the University of Delaware.

He is also on the Cybersecurity Institute Advisory Board for the Community College of Baltimore County.

He lives in Perry Hall, MD with his wife, Lena, of 28 years and their 3 children.

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## Danda Rawat



Danda Rawat is a Professor in the Department of Electrical Engineering & Computer Science (EECS) at Howard University, and the Director of DoD Center of Excellence in Artificial Intelligence & Machine Learning (CoE-AIML). He is engaged in research and teaching in the areas of cybersecurity, machine learning, data analytics and wireless Internet of Things.

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## Deborah Jackson



Deborah Jackson is an NSF Program Manager in the Engineering Research Center (ERC) Program Office, where she leads the Microelectronics, Sensors, and Information Technologies Cluster. She is an expert in electromagnetic phenomena (from radio waves through hard x-rays), is a Senior Member of IEEE, and is a Fellow of the National Society of Black Physicists.

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## Dr. Douglas Maughan



Dr. Douglas Maughan is the inaugural Office Head for the National Science Foundation (NSF) Convergence Accelerator. NSF has launched the program to accelerate use-inspired convergence research in areas of national importance, and initiate convergence team-building capacity around exploratory, potentially high-risk proposals. The teams are multidisciplinary and leverage partnerships resulting in deliverables that will benefit society within a fixed term. NSF intends to support fundamental research while encouraging rapid advances through partnerships that include multiple stakeholders (e.g., industry, academic, not-for-profits, government entities).

Dr. Maughan previously served within the Department of Homeland Security (DHS) Science and Technology (S&T) Directorate as the Division Director of the Industry Partnerships (OIP) Division within the Office of Innovation and Collaboration (OIC). Dr. Maughan was responsible for leading the formation and sustainment of internal and external partnerships across R&D communities, enabling joint R&D and resulting in stronger connections with developer and user communities. Dr. Maughan was responsible for (1) the innovation mechanisms, such as SBIR, SVIP, Prize, and BAAs, (2) Post-R&D activities associated with technology transfer and commercialization, and (3) the Office of the SAFETY Act Implementation.

Dr. Maughan previously served as the Division Director of the Cyber Security Division within the Science and Technology (S&T) Directorate. Dr. Maughan was responsible for helping bring to market over 75 commercial and open-source information security products during the 15 years he served as the Cyber Security Division Director at DHS.

Prior to his appointment at DHS, Dr. Maughan was a Program Manager at the Defense Advanced Research Projects Agency

# SPEAKERS

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(DARPA). Prior to his appointment at DARPA, he worked for the National Security Agency (NSA) as a senior computer scientist and led several research teams performing network security research.

Dr. Maughan received Bachelor's Degrees in Computer Science and Applied Statistics from Utah State University, a Masters degree in Computer Science from Johns Hopkins University, and a PhD in Computer Science from the University of Maryland, Baltimore County (UMBC).

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## Harley Johnson

Harley Johnson is a Professor of Mechanical Engineering and the Associate Dean for Research in the Grainger College of Engineering at the University of Illinois at Urbana-

Champaign. He is the PI and Director of the NSF "DIGI-MAT" NRT in the area of materials and data science, an interdisciplinary training program that supports more than 25 PhD students.

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## Dr. J. Stephen Binkley

J. Stephen (Steve) Binkley is currently serving as the Director (Acting) and Principal Deputy Director in the Office of Science (SC) at the U.S. Department of Energy (DOE). In this capacity,

Dr. Binkley is the senior career science official in the Office of Science, which is third largest Federal sponsor of basic research in the United States, the primary supporter of the physical sciences in the U.S., and one of the premier science organizations in the world.

As the Principal Deputy Director of SC, Dr. Binkley serves as the principal overall advisor to the Director on all aspects of the Office of Science. Dr. Binkley determines the financial and personnel resources needed to achieve mission objectives and support mission operations; oversees and directs the internal organization, staffing, policies, and personnel authorities required to carry out the responsibilities of the organization, including the recruitment of senior managers and technical experts necessary to ensure the success of the programs. He ensures that program activities are strategically conceived and executed to maximize the benefit to organization, the Department, and the United States. Dr. Binkley also serves as the champion for crosscutting issues that affect more than one program office and special research initiatives of priority to Director and the Department leadership.

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## Kenneth Van Treuren

Dr. Van Treuren serves as the Associate Dean in the School of Engineering and Computer Science at Baylor University. He has degrees from the USAF Academy, Princeton University, and the University of Oxford, United Kingdom. Ken spent 21 years in the USAF where he was a pilot and professor at the USAF Academy. He now has 23 years at Baylor University and teaches classes in fluid mechanics and thermodynamics. Research interests include renewable energy to include small wind turbine aerodynamics and noise generation in an urban environment. Currently he is designing Unmanned Aerial System propellers, reducing noise and power requirements.

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## Liping Liu

Liping Liu earned her Ph.D. in Mechanical Engineering from the University of Illinois at Urbana-Champaign. She currently serves as the Associate Dean of Graduate Studies and Research in the College of Engineering at Lawrence Technological University. She is also a faculty in Mechanical Engineering and teaches classes in fluid mechanics, heat transfer, transport phenomena, etc. Her research focuses on thermal sciences and energy systems, such as nanofluids, condensation management, and HVAC & refrigeration systems.

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## Miriam Quintal

Miriam Quintal, ASEE Washington Representative and Managing Principal at Lewis-Burke Associates, boasts a dozen years 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.

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# SPEAKERS

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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 has an undergraduate degree in chemistry with highest honors from Smith College and a master's degree in organic chemistry from Harvard University. She has been a National Science Foundation Graduate Research Fellow and a Fulbright Fellow.

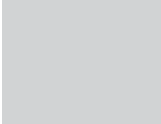
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## Patrick Brown

Patrick Brown, Ph.D., is a program director in the Division of Training, Workforce Development, and Diversity. He received his Ph.D. in chemistry from the University of Maryland, College Park and did his postdoctoral research at the former University of Maryland Biotechnology Institute, and the National Institute of Biomedical Imaging and Bioengineering (NIBIB). The portfolio of NIH training programs he administers includes the predoctoral research training grants in Biotechnology (T32), and the Initiative to Maximize Student Development (T32).

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## Tara A. Schwetz

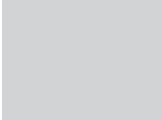


Tara A. Schwetz, Ph.D., is the Acting Principal Deputy Director of the National Institutes of Health (NIH), effective December 20, 2021. For much of 2021, Dr. Schwetz was on detail to the White House Office of Science and Technology Policy as the Assistant Director for Biomedical Science Initiatives. In this role, she led the efforts to stand up the Advanced Research Projects Agency for Health (ARPA-H). The Biden Administration has proposed ARPA-H to tackle some of the biggest health challenges facing Americans by driving medical innovation more rapidly. Since 2019, Dr. Schwetz has served as the Associate Deputy Director of NIH and the Alternate Deputy Ethics

Counselor for NIH. Throughout her nearly 10-year tenure at NIH, Dr. Schwetz has held multiple positions across several Institutes and within the Office of the Director. She has served as the Acting Director and Acting Deputy Director of the National Institute of Nursing Research (NINR), the Chief of the Strategic Planning and Evaluation Branch at the National Institute of Allergy and Infectious Diseases, the Senior Advisor to the Principal Deputy Director of NIH, the NIH Environmental influences on Child Health Outcomes Interim Associate Program Director, and a Health Science Policy Analyst at the National Institute of Neurological Disorders and Stroke. Dr. Schwetz started her career at NIH as an AAAS Science and Technology Policy Fellow at NINR.

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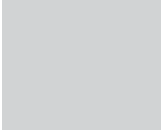
## Tom Russell



Tom Russell is Senior Policy advisor at Lewis-Burke Associates where he focuses on non-secure national security research and policy. He has had a diverse 30-year government science and technology career including service as AFOSR Director, as Director of ARL, and in other high-level scientific leadership positions. \*waiting for final confirmation.

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## Vinod Lohani



Vinod Lohani is an NSF Program Director in the Division of Graduate Education. He is a Professor of Engineering Education and an adjunct faculty member in Civil and Environmental Engineering at Virginia Tech. His research interests are in the areas of computer-supported research and learning systems, engineering education, hydrology, and international collaboration.





