

2024

ASEE Research Leadership Institute

RLI

March 4 -6, 2024

Hilton Arlington | Virginia

PROGRAM BOOK

ABOUT THE RESEARCH LEADERSHIP INSTITUTE

Conference Goals:

The ASEE Engineering Research Council (ERC) is hosting the annual Research Leadership Institute (RLI) at the Hilton Arlington Hotel from March 4-6, 2024. The RLI focuses on leadership and capacity building for associate deans and other research leaders 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 resources for research development, research analytics, enhancing and accelerating research translation, research integrity culture enhancement, faculty incentives for research, managing sustainable and impactful research centers, federal budgeting process, and career development for associate deans for research. The RLI will also include special sessions that will take a deep dive into the use of artificial intelligence in research and an "ADR boot camp" opportunity designed for individuals who recently assumed research leadership roles. We are thrilled to host Dr. Victoria Coleman, Chief Scientist of the USAF, Chief Scientific Advisor to the Secretary of the Air Force, Air Force Chief of Staff, and Chief of Space Operations as our fireside chat guest. Sessions begin Monday morning and continue through Wednesday morning, allowing time for participants to schedule Wednesday afternoon meetings with federal program managers or colleagues in the DC area. Peer networking will also be facilitated via optional small group dinners arranged at nearby restaurants on both Monday and Tuesday evenings. The RLI is a learning and networking opportunity 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 universities. ERC membership is not required for attendance.



ENGINEERING RESEARCH COUNCIL BOARD OF DIRECTORS

Officers

Carrie Berger, ERC Chair, Purdue Polytechnic

John Coulter, ERC Chair Elect, Lehigh University

Joe Konstan, Secretary/ Treasurer, University of Minnesota

Charles Bunting, Acting Immediate Past Chair, Oklahoma State University

Directors

Rob Briber, University of Maryland

Rose Hu, Utah State University

Harley Johnson, University of Illinois, Urbana Champaign

Kimberly L. Jones, Howard University

Forrest Masters, University of Florida

Mark Riley, University of Nebraska-Lincoln

Grace Zhang, George Washington University

Ex-Officio Advisory Members

Doug Tougaw, ASEE President, Michigan Valparaiso University

Jacqueline El-Sayed, ASEE Executive Director

MONDAY, MARCH 4

8:00 a.m. – 5:00 p.m. Gallery Ballroom Foyer	Registration
9:00 a.m. – 10:00 a.m. Gallery III	ERC Board Meeting This Meeting is open to attendees
10:00 a.m. – 11:30 a.m. Gallery I & II	ADR Bootcamp and Networking with ERC Board Members This 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. Moderators: <i>Forrest Masters</i> <i>University of Florida</i> <i>Joe Konstan</i> <i>University of Minnesota</i> <i>Mark Riley</i> <i>University of Nebraska-Lincoln</i> <i>Rose Hu</i> <i>Utah State University</i> <i>John Coulter</i> <i>Lehigh University</i>
11:30 a.m. – 12:00 p.m. Gallery Ballroom Foyer	Refreshment Break

MONDAY, MARCH 4

<p>12:00 p.m. – 1:30 p.m. Gallery I & II</p>	<h2>ERC Business Meeting Lunch & McGraw Awards</h2> <p>The ERC business meeting (open to all RLI attendees) will be conducted as a working lunch and start with an update from Jacqueline El Sayed, Acting Executive Director of the American Society for Engineering Education (ASEE). Updates on the activities of the ASEE Engineering Research Council (ERC) will then be provided. The 2024 McGraw research award recipients will be announced and honored. Candidates for the upcoming ERC Board election will be introduced as well.</p> <p><u>Moderators:</u> <i>Carrie Berger</i> <i>Purdue Polytechnic</i></p>
<p>1:30 p.m. – 1:45 p.m. Gallery Ballroom Foyer</p>	<h2>Refreshment Break</h2>
<p>1:45 p.m. – 3:00 p.m. Gallery I & II</p>	<h2>Best Practices: Faculty Incentives for Research</h2> <p>This session will have round table discussions. Some topics of discussion may include exploring effective strategies for recognizing and rewarding faculty research contributions, ensuring adequate funding and resources to support faculty research activities, providing professional development opportunities, managing faculty workload to ensure a balanced allocation of time and effort across research, teaching, and service responsibilities, fostering collaboration and interdisciplinary research among faculty, and methods for evaluating the impact and outcomes of faculty research.</p> <p><u>Moderators:</u> <i>Grace Zhang</i> <i>George Washington University</i></p> <p><i>Rose Hu</i> <i>Utah State University</i></p>
<p>3:00 p.m. – 3:15 p.m. Gallery Ballroom Foyer</p>	<h2>Refreshment Break</h2>

MONDAY, MARCH 4

3:15 p.m. – 5:00 p.m.
Gallery I & II

Managing Sustainable and Impactful Research Centers and Institutes

David Patterson will present for 30-45 minutes followed by facilitated Q&A.

Speakers:

Dave Patterson
Pardee Professor of Computer Science, Emeritus
University of California at Berkeley

Moderators:

Joe Konstan
University of Minnesota

John Coulter
Lehigh University

5:00 p.m. – 5:45 p.m.
Gallery Ballroom Foyer

Reception & Networking

6:45 p.m.

No Host Dinners at a Variety of Local Restaurants

We have made reservations at a variety of restaurants that are within walking distance of the Hotel. 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.) Please go to <https://www.signupgenius.com/go/10C094BA9AA28A4FDC25-47976792-monday> to pick a venue of your choice and join your RLI colleagues for dinner and conversation.



TUESDAY, MARCH 5

8:00 a.m. – 5:30 p.m. Gallery Ballroom Foyer	Registration
8:00 a.m. – 8:30 a.m. Gallery I & II	Breakfast
8:30 a.m. – 9:30 a.m. Gallery I & II	<h2>Resources for Research Development</h2> <p>This session will provide an overview of research development best practices and the resources universities are employing for a competitive advantage.</p> <p>Speakers:</p> <p><i>Karen Walker</i> Associate Director of Research Development Arizona State University</p> <p><i>Nathan Meier</i> Assistant Vice Chancellor for Research Development, President of NORDP University of Nebraska</p> <p><i>Kellianne Lauer</i> Vice President McAllister & Quinn</p> <p><i>Dr. Naomi Webber</i> Senior Principal Lewis Burke</p> <p>Moderators:</p> <p><i>Harley Johnson</i> University of Illinois, Urbana Champaign</p> <p><i>Carrie Berger</i> Purdue Polytechnic</p>

TUESDAY, MARCH 5

<p>9:30 a.m. – 11:00 a.m. Gallery I & II</p>	<h2>Federal Budgeting Process & Funding Outlook</h2> <p>This session will provide a background on the federal budgeting process and just-in-time information about the federal funding outlook based on administration’s priorities and goals.</p> <p><u>Speakers:</u></p> <p><i>Dr. Joel Parriott</i> <i>Assistant Director for Federal R&D</i> <i>OSTP</i></p> <p><u>Moderators:</u></p> <p><i>Carrie Berger</i> <i>Purdue Polytechnic</i></p> <p><i>Forrest Masters</i> <i>University of Florida</i></p>
<p>11:00 a.m. – 11:15 a.m. Gallery Ballroom Foyer</p>	<h2>Refreshment Break</h2>
<p>11:15 a.m. – 12:30 p.m. Gallery I & II</p>	<h2>Research Analytics – Methods and Models to Track Research Activity and Progress</h2> <p>This session will focus on the experiences of two engineering research administrators in gathering and analyzing data to track research activity in their colleges. The speakers will share lessons learned and insight on research proposal, award, and expenditure data analytics.</p> <p><u>Moderators:</u></p> <p><i>Forrest Masters</i> <i>University of Florida</i></p> <p><i>Harley Johnson</i> <i>University of Illinois, Urbana Champaign</i></p>

TUESDAY, MARCH 5

12:30 p.m. - 1:45 p.m.
Gallery I & II

ERC Lunch and Fireside Chat

This year our fireside chat guest is Dr. Victoria Coleman, Chief Scientist, United States Department of the Air Force; Dr. Coleman will be discussing her research leadership journey and insights gained through her vast experiences working in the academy, the federal government, and the private sector.

The ERC Chair, Carrie Berger, will facilitate a conversation with Dr. Coleman to discuss leadership, research competitiveness, artificial intelligence, and broadening participating in research. Our time together will include questions from the audience.

Speaker:

*Dr. Victoria Coleman
Chief Scientist
U.S. Air Force*

Moderators:

*Carrie Berger
Purdue Polytechnic*

1:45 p.m. – 2:00 p.m.
Gallery Ballroom Foyer

Refreshment Break

TUESDAY, MARCH 5

2:00 p.m. – 3:15 p.m.
Gallery I & II

Accelerating Research Translation

To enhance the scale and pace of realized societal impact from research discoveries an increasing level of importance is being placed on research translation. This session will focus on how the National Science Foundation and example NSF funded institutions are addressing the acceleration of research translation.

Speakers:

*Dr. Pradeep Fulay
Program Director
National Science Foundation*

*Dr. Daniel Marena
Program Director
National Science Foundation*

*John Coulter
Professor and Senior Associate Dean for Research
Lehigh University*

*Dr. Jill Higginson
Professor
University of Delaware*

Moderators:

*John Coulter
Lehigh University*

<p>3:15 p.m. – 4:30 p.m. Gallery I & II</p>	<h2>Helping New Faculty get Started with Research Funding</h2> <p>This session will have a panel discussion from 3 ADRs on resources and programs at both the (local) College and (campus) University levels on how their institution helps new faculty get started with research. This will be followed by table breakouts for discussion and sharing of ideas among attendees. A Google doc will be available to each table to share ideas. The documents will be merged and shared with RLI attendees.</p> <p><u>Speakers:</u></p> <p><i>Seetha Raghavan Associate Dean of Research and Graduate Studies Embry Riddle Aeronautical University</i></p> <p><i>Joseph Konstan Associate Dean for Research University of Minnesota</i></p> <p><i>John Verboncoeur Senior Associate Dean for Research and Graduate Studies Michigan State University</i></p> <p><u>Moderators:</u></p> <p><i>Rob Briber University of Maryland</i></p> <p><i>Kimberly L. Jones Howard University</i></p>
<p>4:30 p.m. – 5:00 p.m. Gallery Ballroom Foyer</p>	<h2>Cocktail Hour</h2>

TUESDAY, MARCH 5

5:00 p.m. – 6:00 p.m.
Gallery I & II

Deep Dive into Current Issues

This session is a chance to address topics not covered elsewhere in the program, or to go into greater depth on topics of interest. This year the deep dive conversation will focus on the use of artificial intelligence in the research enterprise. Bring refreshments from the cocktail hour and chat with colleagues about this important topic that is impacting us all.

Moderators:

Carrie Berger
Purdue Polytechnic

John Coulter
Lehigh University

6:00 p.m.



No Host Dinner

We have made reservations at a variety of restaurants that are within walking distance of the Hotel. 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.) Please go to <https://www.signupgenius.com/go/10C094BA9AA28A4FDC25-47977500-tuesday> to pick a venue of your choice and join your RLI colleagues for dinner and conversation.

WEDNESDAY, MARCH 6

8:00 a.m. – 11:00 a.m. Gallery Ballroom Foyer	Registration
8:00 a.m. – 8:30 a.m. Gallery I & II	Breakfast
8:30 a.m. – 9:45 a.m. Gallery I & II	<h2>Career Development for ADRs</h2> <p>The position of Associate Dean for Research can lead to other roles within one's home institution or elsewhere. This session will have a panel discussion with former ADRs who have gone on to new positions (either permanent or interim). Each panelist will speak about their career trajectory and what led them to their new position(s) after being an Associate Dean for Research, followed by Q&A from the audience.</p> <p>Moderators:</p> <p><i>Rob Briber</i> <i>University of Maryland</i></p> <p><i>Kimberly L. Jones</i> <i>Howard University</i></p> <p>Speakers:</p> <p><i>Vahid Motevalli</i> <i>Interim Associate Vice Chancellor for Research & Director of School of Science, Engineering & Technology</i> <i>Penn State Harrisburg</i></p> <p><i>Krista Walton</i> <i>Associate Vice President for Research Operations and Infrastructure</i> <i>Georgia Tech</i></p> <p><i>Eric Perrault</i> <i>Vice President for Research</i> <i>Northwestern University</i></p> <p><i>Pamela Norris</i> <i>Vice Provost for Research</i> <i>George Washington University</i></p> <p><i>Rob Briber</i> <i>University of Maryland</i></p>

WEDNESDAY, MARCH 23

9:45 a.m. – 11:00 a.m.
Gallery I & II

Research Integrity Culture Enhancement

This session will focus on discussing research integrity culture enhancement, ethical conduct, regulatory requirements from universities and funding agencies. It will bring the directors of the research integrity offices from NIH, NSF and University Vice Provost for Research to share their opinions on the topic.

Speakers:

Sheila Garrity
Director for the Office of Research Integrity
NIH

Pamela M. Norris
Vice Provost for Research
The George Washington University

Eduardo Misawa
Senior Advisor and Scientific Integrity Official, Office of Director
National Science Foundation

Moderators:

Rose Hu
Utah State University

Grace Zhang
George Washington University

11:00 a.m. – 11:15 a.m.
Gallery I & II

Closing Statements

Speakers:

Carrie Berger
Purdue Polytechnic

SPEAKERS



Dr. Robert M. Briber
Associate Dean for Research
A James Clark School of
Engineering
University of Maryland

Dr. Robert Briber is the Associate Dean for Research for the A. James Clark School of Engineering, Special Assistant to the University President for Strategic Initiatives and Professor of Materials Science and Engineering at the University of Maryland. He was interim Dean for the Clark School from 2020 - 2021. He was Chair of the Department of Materials Science and Engineering from 2003 - 2015. Dr. Briber has a B.S. degree in Materials Science and Engineering from Cornell University and a Ph.D. degree in Polymer Science and Engineering from the University of Massachusetts at Amherst. Prior to joining the University of Maryland, he was an NRC postdoctoral fellow and staff scientist at the National Institute of Standards and Technology. He has been the director of High Resolution Neutron Scattering Research Program at the University of Maryland for the past 20 years and is an internationally recognized researcher in the field of materials science with a specialization in polymers physics and the characterization of soft materials by neutron and X-ray scattering. He is a past President of the Neutron Scattering Society of America, a Fellow of the American Physical Society and of the Neutron Scattering Society of America, a recipient of the Department of Commerce Bronze Medal, a University of Maryland Distinguished Scholar-Teacher and a former editor of the Journal of Polymer Science - Polymer Physics Edition.



Dr. Victoria Coleman
Chief Scientist
U.S. Airforce

Dr. Victoria Coleman is the Chief Scientist of the United States Air Force, Arlington, Virginia. She serves as the Chief Scientific Advisor to the Secretary of the Air Force, Air Force Chief of Staff, and Chief of Space Operations. She provides assessments on a wide range of scientific and technical issues affecting the department's mission. In this role, she identifies and analyzes technical issues, bringing them to the attention of department leaders. She interacts with other principals, operational commanders, combatant commands, acquisition, and science and technology communities to address cross-organizational issues and provide solutions. Dr. Coleman also interacts with other services and the Office of the Secretary of

Defense on issues affecting the Department of the Air Force's technical enterprise. She serves on the Executive Committee of the Air Force Scientific Advisory Board and is the Principal Science and Technology Representative of the Air Force to the civilian scientific and engineering community and to the public at large. Dr. Coleman served as the 22nd Director of DARPA before joining the Air Force.

Dr. Coleman is on leave from the University of California, Berkeley. Since 2016, Dr. Coleman has held an academic research appointment at the Berkely Center for Information Technology in the Interest of Society where she leads science and technology policy on microelectronics and efforts to develop tools for countering digital authoritarianism. Dr. Coleman has more than 35 years of experience in computer science and technology, including both an academic leader and industry executive. Before DARPA, she served as the Chief Executive Officer of Atlas AI P.B.C., a Silicon Valley start-up that brings world-class artificial intelligence solutions to sustainable development. By combining satellite data with other data sets, Atlas AI's proprietary deep-learning models create actionable insights for governments, non-governmental organizations and commercial companies.



Dr. John Coulter
Professor & Senior Associate Dean
for Research
Lehigh University

John P. Coulter is a Professor in the Department of Mechanical Engineering and Mechanics at Lehigh University. His areas of research focus include manufacturing and manufacturing systems with a particular emphasis on polymer based materials, injection molding processing, and additive manufacturing. On the administrative front he also currently serves as the Senior Associate Dean for Research for Lehigh's P.C. Rossin College of Engineering and Applied Science. John has 33 years of teaching and research experience at Lehigh, as well as several years of industrial experience with Lord Corporation, a multi-national company specializing in materials and devices for vibration and acoustic control. During his time at Lehigh, he has taught several thousand undergraduate students, and mentored 28 doctoral students and 65 master's students. His accomplishments at Lehigh have been recognized through continuous federal, state, and industrial research support as well as numerous awards for teaching and research including the NSF National Young Investigator (i.e. CAREER) award, a NSF Presidential Faculty Fellow (i.e. PECASE) award, a Future Technology Award from the Society of

SPEAKERS

Plastics Engineers, and two Innovative Curriculum Awards from the American Society of Mechanical Engineers. Professor Coulter is also very active in research translation, and serves as the PI on a \$6 Million NSF Accelerating Research Translation grant recently awarded to Lehigh. He is also a Fellow of the American Society of Mechanical Engineers and the Chair-Elect of ASEE's Engineering Research Council.



Dr. Joseph Konstan
Associate Dean for Research
College of Science & Engineering
University of Minnesota

Joseph A. Konstan has served since 2019 as Associate Dean for Research in the University of Minnesota's College of Science and Engineering (a college with over 430 tenure-track faculty spanning 12 departments in engineering, physical sciences, mathematics, and computer science). Dr. Konstan received his Ph.D. from the University of California, Berkeley. He is also Distinguished McKnight Professor and Distinguished University Teaching Professor of Computer Science and Engineering where his work focuses on human-computer interaction, social computing, and recommender systems. Prior to serving as Associate Dean, Joe spent 20 years in faculty governance including chairing UMN's Senate Committee on Faculty Affairs and later chairing the Senate and Faculty Consultative Committees. He is a Fellow of the ACM, AAAS, and IEEE, a member of the CHI Academy, Past-President of ACM SIGCHI, the 4500-member Special Interest Group on Human-Computer Interaction, and a three-time member of the ACM Council.



Dr Pradeep Fulay,
Program Director
National Science Foundation

Dr. Pradeep Fulay currently serves as a Program Director (PD) in the Technology, Innovation and Partnerships (TIP) Directorate at NSF. He is the lead program director for the recently announced Accelerating Research Translation (ART) program at NSF. In addition, Pradeep is leading Convergence Accelerator projects focused on enhancing the quality of life of persons with disabilities (PWD) and quantum technology. He is an internationally renowned STEM researcher and educator with 35 years of experience in research and research administration. Pradeep earned his B.Tech and M.Tech degrees from the Indian Institute of Technology (IIT) Bombay. He earned

is Ph.D. in Materials Science and Engineering from University of Arizona, Tucson. Pradeep is an elected Fellow of the American Ceramic Society. His interdisciplinary research in electronic, magnetic and photonic materials has been the subject of many peer reviewed publications, patents, and textbooks.



Sheila Garrity
Director for the Office of
Research Integrity

Before coming to ORI, Ms. Garrity served as Associate Vice President of Research Integrity at George Washington University (GW) from 2014 to 2023 where she oversaw operations of the Office of Laboratory and Radiation Safety, Office of Human Research, Office of Animal Research, Office of Research Integrity and Regulatory Affairs and served as the institutional Research Integrity Officer (RIO). At GW Garrity was responsible for policy development, informational sessions, and development of educational modules to assist investigators with understanding their ethical and fiduciary responsibilities regarding their research.

Prior to that, Ms. Garrity spent more than 20 years at Johns Hopkins University School of Medicine where she served as the director of the Division of Research Integrity and Research Integrity Officer (RIO). She is a founding member and first president of the Association for Research Integrity Officers (ARIO, founded 2013). Ms. Garrity was in the first group of teaching RIOs when ORI launched its first series of RIO Bootcamps in the early 2000's.

Ms. Garrity earned her JD from the University of Maryland School of Law and her MBA and MPH at Johns Hopkins where she also received a certificate in Health and Human Rights.



Dr Jill Higginson,
George W. Laird Professor of
Mechanical Engineering
University of Delaware

Dr. Jill Higginson is the George W. Laird Professor in the Departments of Mechanical Engineering and Biomedical Engineering at the University of Delaware. In 2022, she became the inaugural Director of the Institute for Engineering Driven Health with a mission to develop and translate new technologies to advance human health. From

SPEAKERS

2019 to 2023, she served as Associate Dean of Graduate and Post Graduate Education in the College of Engineering. Dr. Higginson also served as the Director of the Center for Biomechanical Engineering Research and was the founding Director of Biomedical Engineering at UD in 2010. In recognition of her contributions, Dr. Higginson was awarded the College of Engineering Outstanding Junior Faculty Award in 2014 and the Excellence in Education Award in 2015. She was elected Fellow in the Defense Science Study Group (2016/2017), American Institute of Medical and Biological Engineering (2019), American Society of Mechanical Engineers (2022), and American Society of Biomechanics (2023). She was trained at Cornell University (BS Mechanical Engineering '96), Penn State University (MS Bioengineering '98), and Stanford University (PhD Mechanical Engineering '05). The fundamental objective of the Neuromuscular Biomechanics Lab directed by Dr. Higginson is to improve the understanding of muscle coordination for normal and pathological movements through coupled experimental and simulation studies. Computational models are used to develop a mechanistic framework that relates muscle impairments to gait deviations. The overarching goal is to form a scientific rationale for therapeutic interventions to improve movement.



Kellianne Lauer **Vice President** **McAllister & Quinn**

Kellianne Lauer is a Vice President in McAllister & Quinn's growing Research Universities Practice. In this role, Kellianne manages consulting services for R1 and R2 university clients in McAllister & Quinn's Research Universities Practice. Drawing on her experience working directly with multi-disciplinary teams to pursue complex funding opportunities, Kellianne works strategically to address the research development needs of universities, supporting and enabling growth in their research enterprise and improving their ability to pursue and win extramural funding for groundbreaking research. Kellianne specializes in delivering services to strategically plan for funding opportunities; strengthen relationships with sponsors; design and deliver faculty training programs; and develop competitive proposals for large, complex federal funding opportunities.

Kellianne earned an M.B.A from Arizona State University and a B.A. from College of Saint Benedict. Kellianne is certified by the Association of Proposal Management Professionals as a Practitioner-level Proposal Manager (CP APMP) and is a trained

facilitator. She is a member of the National Organization of Research Development Professionals (NORDP). Kellianne is a returned Peace Corps volunteer and served in Armenia as an English teacher and teacher trainer.



Dr. Pamela Norris **Vice Provost for Research** **George Washington University**

Dr. Pamela Norris is the Vice Provost for Research at George Washington University and the Frederick Tracy Morse Professor Emerita of Mechanical and Aerospace Engineering at University of Virginia, where she previously served as Executive Associate Dean for Research and Executive Dean in the School of Engineering. She is recognized globally as a leading expert in nanoscale heat transfer, especially interfacial thermal transport with a focus on thermal management across a range of length scales. Dr. Norris is well-known for her mentoring skills and for her dedication to increasing diversity in the STEM disciplines. In 2016 she was honored with the Society of Women Engineers Distinguished Engineering Educator Award. In 2021 she was elected as honorary member of American Society of Mechanical Engineers for "international leadership in nano, micro and macroscale thermal science and engineering research; for tireless efforts to advance diversity in STEM fields; and for demonstrating engineering excellence as an outstanding mentor for students and faculty." She currently serves as the Editor-in-Chief of Nanoscale and Microscale Thermophysical Engineering. Dr. Norris received her Ph.D. from Georgia Institute of Technology and was a postdoctoral scholar at University of California, Berkeley.



Dr Daniel Marenda **Program Director** **National Science Foundation**

Dr. Daniel (Dan) Marenda is a Program Director at the National Science Foundation where he leads the Postdoctoral Research Fellowships in Biology (PRFB) and BIO-LEAPS programs in the Human Resources Cluster in the Division of Biological Infrastructure (BIO). Dan is currently on detail to the Directorate for Technology, Innovation, and Partnerships (TIP), where he is working in workforce development. In TIP, Dr. Marenda co-leads the Experiential Learning for Emerging and Novel Technologies (ExLENT) program, and is on the working group for the

SPEAKERS

Accelerating Research Translation (ART) program. Prior to joining the NSF in 2021, Dr. Marendra was a Professor in the Department of Biology and the Associate Dean for Research in the College of Arts and Sciences at Drexel University in Philadelphia. His laboratory studied developmental neurobiology/epigenetics and Alzheimer's disease using *Drosophila melanogaster* as a model system. At the NSF, Dr. Marendra manages a portfolio that supports science that spans the BIO Directorate (from molecules to ecosystems), and increases the representation of underrepresented groups in Biology. He also participates in the Eddie Bernice Johnson INCLUDES Initiative and the Graduate Research Fellowships Program (GRFP). He currently lives in Baltimore, MD and enjoys visiting the Maryland and Pennsylvania Renaissance Fairs with his wife and three sons.



Nathan Meier
Assistant Vice Chancellor for
Research Development, President
of NORDP
University of Nebraska

Nathan Meier is Assistant Vice Chancellor for Research Development in the Office of Research and Economic Development at the University of Nebraska-Lincoln (UNL). Directing UNL's Research Development Group, Meier increases faculty and institutional competitiveness by providing leadership for internal funding, proposal development, research impact, external recognition, and faculty research development programs. He also is a member of UNL's Council on Inclusive Excellence and Diversity and serves on the boards of Huru International and the National Organization of Research Development Professionals (NORDP). Currently, Meier is the NORDP President. Meier also is an advisor to the Center for Advancing Research Impact in Society and the NORDP Consultants Program—both funded by the National Science Foundation. Meier earned a B.A. in English from the University of Nebraska at Kearney and a Master of Technical and Professional Communication from Auburn University.



Eduardo Misawa
Senior Advisor
Office of Director and Scientific
Integrity Officer
NSF

Eduardo Misawa has a B.Sc. and M.Sc. degrees from University of Sao Paulo and Ph.D. degree from the

Massachusetts Institute of Technology. He held positions at NSF as a program director and several management positions in the Directorate for Engineering, Directorate for Computer and Information Sciences, Directorate for Mathematical and Physical Sciences, and Directorate for Education and Human Resources at the National Science Foundation. His research and teaching experience includes Nonlinear Dynamics, Dynamics and Control, Nanotechnology, Precision Engineering, Vehicle Dynamics, Bioinformatics, Biotechnology, Biomedical Engineering, Computational and Data Sciences, and Science and Technology Policy. He is currently a Senior Advisor in the Office of Director and Scientific Integrity Officer at NSF.



Dr. Vahid Motevalli
Interim Vice Chancellor for
Academic Affairs
Penn State Harrisburg

Dr. Vahid Motevalli is the Interim Vice Chancellor for Academic Affairs at Penn State

Harrisburg. Prior to this position, he served as Director of the School of Science, Engineering, and Technology and Interim Associate Vice Chancellor for Research at the same institution. He holds a Bachelor of Science, Master's of Science and a Doctoral degree in mechanical engineering, all from the University of Maryland, College Park. Dr. Motevalli has more than 35 years of teaching, research and administrative experience in academia, government, and industry. He has been conducting interdisciplinary research and education throughout his career and considers collaboration as a cornerstone of his leadership approach. Prior to joining Penn State, he had been a tenured professor of mechanical engineering and associate dean for research and innovation at Tennessee Tech's College of Engineering (August 2013 - August 2021). He concurrently served as the interim director of the Center of Excellence for Manufacturing Research at Tennessee Tech from 2014-2018. Prior to joining Tennessee Tech, he served at Purdue University as the founding director of the Center for Technology Development, project director and faculty advisor for the Purdue EcoCar2, and the head of the Mechanical Engineering Technology Department. Dr. Motevalli has also served on several review panels for the National Science Foundation and other government agencies and the National Academies as well as serving as reviewer for several journals and conferences and on technical organizing committees. In December 2020, he was selected and placed on the Fulbright Specialist for a four-year term starting in January 2021. Motevalli served as the ASME Congressional Fellow in the U.S. House of Representative in 1995-96. He was a member of the National

SPEAKERS

Academies Transportation Research Board Committee on Aviation Security and Emergency Preparedness from 2010 to 2019, and currently serves on the Standing Committee on Intergovernmental Relations in Aviation.



Dr. David Patterson

David is Partdee Professor Emeritus at UC Berkeley Pardee professor emeritus, a Google distinguished engineer, Director of Google's RIOS (RISC-V International Open Source) Laboratory, and the RISC-V International Vice-Chair. He is well-known for his work on RISC and RAID

projects at UC Berkeley and for his service as President of ACM and Chair of the Computing Research Association. Among his many awards are the 2017 ACM A.M. Turing Award and the 2022 NAE Charles Stark Draper Prize for Engineering (both with John Hennessy for their work on Reduced Instruction Set Computing).



Dr. Joel Parriott Assistant Director for Federal R&D OSTP

Dr. Joel Parriott is the Assistant Director for Federal Research and Development (R&D) at the

White House Office of Science and Technology Policy (OSTP). In this capacity, he coordinates federal agency R&D budgets and works—in cooperation with the agencies and the White House Office of Management and Budget (OMB)—to align agency budgets and program with Administration priorities.

Joel is on detail to OSTP from NSF. He is an IPA at NSF on assignment from the American Astronomical Society (AAS), where he is the Deputy Executive Officer and Director of Public Policy. In that capacity, he led the Society's public policy and advocacy efforts and served on the senior management team having overseen the scholarly journal, scientific conference, communications, and membership departments.

Before moving to the AAS, he spent a decade at OMB overseeing the budgets and management initiatives for the National Science Foundation (NSF) and the Department of Energy's Office of Science (DOE/SC) and on behalf of the President. He represented OMB on numerous National Science and Technology Council interagency working groups and subcommittees.

Prior to his service at OMB, Joel was a senior program officer at the National Academies of Science, Engineering, and Medicine, where

he staffed high-level advisory committee studies on policy issues in physics and astronomy for NSF, DOE/SC, and NASA.

Joel earned his doctorate in astronomy and astrophysics at the University of Michigan. He also holds a Certified Association Executive (CAE) designation from the American Society of Association Executives.



Dr. Eric Perreault Vice President for Research Northwestern University

Eric Perreault is the Vice President for Research at Northwestern University, and Professor of

Biomedical Engineering and Physical Medicine and Rehabilitation. He has a joint appointment at the Shirley Ryan AbilityLab. He received his B.Eng. and M.Eng. degrees in Electrical Engineering from McGill University and his PhD in Biomedical Engineering from Case Western Reserve University. Eric's research focuses on understanding the neural and biomechanical factors involved in the control of multi-joint movement and posture and how they are modified following neuromotor pathologies such as stroke and spinal cord injury. The goal is to provide a scientific basis for understanding normal and pathological motor control that can be used to guide rehabilitative strategies for individuals with motor deficits. Applications include rehabilitation following stroke, musculoskeletal injuries, and user interfaces for neuroprosthetic control. Eric has served as Chair of Biomedical Engineering and Associate Dean for Research in Engineering at Northwestern. He is a fellow of the American Institute for Medical and Biological Engineering, and was recently Chair of the National Advisory Board on Medical Rehabilitation Research, and President of the International Society for Electrophysiology and Kinesiology.



Dr. Seetha Raghavan Associate Dean of Research and Graduate Studies Professor of Aerospace Embry-Riddle Aeronautical University

Dr. Raghavan is the Associate Dean of Research and Graduate Studies and Professor of Aerospace Engineering in the College of Engineering, Embry-Riddle Aeronautical University. Her research interests are in the areas of Mechanics of aerospace structures and

SPEAKERS

materials. She began her academic career in Fall 2008 after completing her doctoral studies at Purdue University, Indiana, School of Aeronautics and Astronautics in the area of Structures & Materials. She obtained her M.S., Aeronautical Engineering in Structures at ISAE-SUPAERO, Toulouse, France where she also worked with Messier Bugatti in Velizy, Paris (S-92 wheels and brakes testing). Prior to this, she completed her B.Eng in Mechanical Engineering at Nanyang Technological University, Singapore. She has 7 years of employment experience in the aerospace industry where she was a senior engineer involved in Aircraft Structural Analysis (F-5), Aircraft Maintenance, Repair & Modifications and Non-destructive testing research & development. Dr Raghavan's research has a focus on investigating the mechanics of high temperature coatings for extreme environments in propulsion, hypersonic flight, space exploration and energy applications as well as developing multifunctional sensing materials for wear and impact resistance, structural integrity and damage detection. She is an Associate Fellow of the American Institute of Aeronautics and Astronautics where she serves as the Editor-in-Chief for the Progress in Astronautics and Aeronautics Book Series. She was honored nationally by Women in Aerospace with the 2019 Aerospace Educator Award and she was recently awarded the Susan Bulkeley Butler Center for Leadership Excellence Distinguished Purdue Alumni Scholar Award 2023.



Dr. John P. Verboncoeur
Senior Associate Dean for Research & Graduate Studies
College of Engineering
Michigan State University

Dr. John P. Verboncoeur is the Senior Associate Dean for Research and Graduate Studies in the College of Engineering at Michigan State University. He received a B.S. from the University of Florida, M.S. and Ph.D. in from the University of California-Berkeley (UCB), holding the DOE Magnetic Fusion Energy Technology Fellowship. After serving as a joint postdoc at Lawrence Livermore National Laboratory and UCB in Electrical Engineering and Computer Science (EECS), he was appointed Associate Research Engineer in UCB-EECS, and to the UCB Nuclear Engineering Department. He has served as the Chair of the Computational Engineering Science Program at UCB. In 2011, was moved to Michigan State University as Professor of Electrical and Computer Engineering and Computational Mathematics, Science, and Engineering. His research interests are in theoretical and computational plasma physics, with a broad range of applications spanning low temperature plasmas for lighting, thrusters and materials processing to hot plasmas for fusion, from ultra-cold

plasmas to particle accelerators, from beams to pulsed power, from intense kinetic nonequilibrium plasmas to high power microwaves. He is currently an Associate Editor for Physics of Plasmas, and has served as a guest editor and/or frequent reviewer for IEEE Transactions on Plasma Science, IEEE Transactions on Electron Devices, as well as a number of other plasma and computational journals. He is Past President of the IEEE Nuclear and Plasma Sciences Society, and a member of the IEEE TAB Management Committee. As Associate Dean for Research in the College of Engineering, he oversees college research activities and strategy. He has also run a number of technology startup companies, including development of one of the big three consumer credit reports, work on the hardware and software of the US Postal Service Mail Forwarding System, command and control software in the defense sector, computerized exercise equipment, and a pioneering cloud based health care management system. He is a fellow of the IEEE.



Karen Walker
Associate Director of Research Development
Arizona State University

Karen Walker is Associate Director of Research Development at Arizona State University (ASU).

Prior to joining ASU, she worked in research and development in the biotech industry. Karen launched the competitive intelligence function at ASU in 2013. She is the founder of the national Competitive Intelligence Working Group and is certified in CI practices from the Strategic Consortium of Intelligence Professionals. Karen received the 2022 Innovation Award from the National Organization of Research Development Professionals (NORDP) for her contributions to establishing academic competitive intelligence as a field within research development.



Dr. Krista S. Walton
Associate Vice President for Research Operations and Infrastructure
Georgia Tech

Krista S. Walton is the Associate Vice President for Research Operations and Infrastructure and Professor and Robert "Bud" Moeller Faculty Fellow in the School of Chemical and Biomolecular Engineering at Georgia Tech. She received her B.S.E. in chemical engineering from the University of Alabama-Huntsville in 2000 and obtained her Ph.D. in chemical engineering from

Vanderbilt University in 2005. Prof. Walton completed an ACS PRF Postdoctoral Fellowship at Northwestern University in 2006. Her research program focuses on the design, synthesis, and characterization of functional porous materials for use in adsorption applications including CO₂ capture, atmospheric water extraction, and air purification. She has raised over \$35M in external research funding as PI during her career. She has published over 130 peer-reviewed articles and presented dozens of plenary lectures, keynotes, and invited seminars. Walton has mentored 25 PhD graduates from her group and currently advises 8 PhD students and 4 senior researchers. Prof. Walton co-founded three spin-off companies from her research over the past decade and currently serves as an Associate Editor for the ACS Journal Industrial & Engineering Chemistry Research. She was the founding Director and Lead PI of Georgia Tech's DOE Energy Frontier Research Center, UNCAGE-ME. She is currently serving as a member of the 2022-2024 cohort of DARPA's prestigious Defense Science Study Group. Prof. Walton's accomplishments have been recognized by many national and international awards including the Department of Energy Ernest Orlando Lawrence Award for Atomic, Molecular, and Chemical Sciences (2020), the AIChE FRI/John G. Kunesh Award for Excellence in Separations Research (2016), the inaugural International Adsorption Society Award for Excellence in Publications by a Young Member of the Society (2013), and the Presidential Early Career Award for Scientists and Engineers (2007).



Dr. Naomi Webber
Senior Principal
Lewis Burke

Dr. Naomi Webber advances client priorities in both fundamental and applied research, with a focus on engineering, physical sciences, and computer sciences, as well as innovation activities and international research collaboration. Naomi has a Ph.D. in Physical Chemistry and extensive experience in research administration, strategic planning, science policy, and international relations, which enables her to support client activities in a broad range of areas.

Naomi has over 16 years of science policy experience including nine years at research funding agencies in the United Kingdom. During her time at the U.K. funding agencies, Naomi gained a broad range of experience including roles in grant proposal management, university relationship engagement, international affairs, and served as Chief of Staff. Naomi then moved to the United States to build international research collaborations between U.K. and U.S. research funding agencies. In that role, Naomi developed insight into a broad range of U.S. federal research agencies. For almost a decade, Naomi has provided a unique brand of nuanced, strategic advice to Lewis-Burke clients.