Speakers Biographies:

M. Katherine Banks  
Dean of Engineering, Texas A&M University

As dean of the College of Engineering, University Distinguished Professor and holder of the Harold J. Haynes Dean's Chair in Engineering, Banks leads one of the largest engineering schools in the country, with more than 16,900 students and 500 faculty. Banks initiated the 25 by 25 program, a controlled enrollment growth program with a goal of 25,000 engineering students by 2025.

Banks was previously the Bowen Engineering Head for the School of Civil Engineering at Purdue University and the Jack and Kay Hockema Professor at Purdue. She received her Bachelor of Science in Engineering from the University of Florida, Master of Science in Engineering from the University of North Carolina, and Doctorate of Philosophy in civil and environmental engineering from Duke University.

Banks is a member of the National Academy of Engineering and Fellow of the American Society of Civil Engineers. She has received numerous awards including the American Society of Civil Engineers Petersen Outstanding Woman of the Year Award, American Society of Civil Engineers Rudolph Hering Medal, Purdue Faculty Scholar Award, Sloan Foundation Mentoring Fellowship and the American Association of University Women Fellowship.

Ian M. Robertson  
Dean, College of Engineering, University of Wisconsin-Madison

Dr. Ian Robertson joined the University of Wisconsin-Madison in 2013 as the Dean of the College of Engineering. Prior to this he was the Donald B. Willett Professor of Engineering in the Department of Materials Science and Engineering at the University of Illinois and served as Head of the Department from 2005-2009. From 2011 to 2013 Dr. Robertson served as the Director of the Division of Materials Research at the National Science Foundation.
He received a B.Sc. degree (first class) in Applied Physics from Strathclyde University, Glasgow Scotland in 1978 and his D.Phil (Metallurgy) from the University of Oxford in 1982.

His insight to the mechanisms responsible for hydrogen embrittlement of metals was recognized by the Department of Energy in 1984 when he received the DOE prize for Outstanding Scientific Accomplishment in Metallurgy and Ceramics. He has been the Editor-in-Chief of the review journal Current Opinion in Solid State and Materials Science since 2009. He has been elected a Fellow of the ASM International, American Association for the Advancement of Science, The Minerals, Metals & Materials Society, and the Materials Research Society.

Michelle B. Sabick
Dean, Parks College of Engineering, Aviation and Technology
Saint Louis University

Dr. Michelle Sabick assumed the role of Dean of Parks College of Engineering, Aviation and Technology at Saint Louis University in July of 2016. Prior to that she was Chair of the Department of Biomedical Engineering at Saint Louis University. Dr. Sabick began her academic career at Boise State University in Boise, Idaho where she served as Chair of the Department of Mechanical and Biomedical Engineering for three years.

Sabick earned a BS degree in Biomedical Engineering from Case Western Reserve University and MS and PhD degrees in Biomedical Engineering from the University of Iowa. Dr. Sabick’s research areas are orthopedic biomechanics and sports medicine. Her primary focus is on how highly ballistic human movements affect the joints of the upper extremity. She is the President-Elect of the American Society of Biomechanics.

Throughout her career, Sabick has been passionate about improving undergraduate engineering education. She has been highly involved in efforts to transform STEM teaching practices at both Saint Louis University and Boise State. She is working on a Boeing-funded project to infuse math into the middle school curriculum in the St. Louis Public School System.

Eric W. Johnson
Dean, College of Engineering, Valparaiso University
Eric W. Johnson received his B.S. degree in electrical engineering from Valparaiso University in 1987, and his M.S. and Ph.D. degrees in computer science and engineering from the University of Notre Dame in 1994 and 1997. After completing his Ph.D., he joined the faculty at Valparaiso University where he has held the Paul and Cleo Brandt Professorship, served as Chair of the Electrical and Computer Department, and helped create the Valparaiso International Engineering Programs. His research interests include modeling electronic components using nanodevices and engineering education pedagogy. In January of 2013, he was named Dean of the College of Engineering where he continues to promote holistic engineering education and entrepreneurial-minded learning.

Adam L. Hamilton
President and CEO, Southwest Research Institute

Hamilton holds a master’s of science degree in aerospace engineering and engineering mechanics, and a bachelor’s of science degree in aerospace engineering, both from The University of Texas at Austin. He is a certified Professional Engineer in Texas. During his career, Hamilton has provided technical expertise to a myriad of projects in government and industry while also providing business and community leadership. His multidisciplinary technical expertise includes engineering, science, and risk assessment.

Previously, Hamilton was the founding president and CEO of Signature Science, LLC, in Austin, Texas, a wholly-owned subsidiary of SwRI. Hamilton is currently the chairman of Signature Science.

He serves on the Executive Committee of the United Way of San Antonio and Bexar County. He served as the co-Chair of the 2015 United Way Volunteer of the Year (VOYA) event and as part of the Campaign Cabinet in 2016. Hamilton is currently serving on the External Advisory Committee (EAC) of The University of Texas at Austin Department of Aerospace Engineering and Engineering Mechanics. He is also on the board of the Greater San Antonio Chamber of Commerce and The University of Texas at San Antonio (UTSA) College of Sciences Advancement Council. He is a trustee of the San Antonio Medical Foundation and a special trustee of the Texas Biomedical Research Institute. Hamilton is a member of the American Society of Mechanical Engineers Industry Advisory Board and a member of the Industry and Community Affiliates of The Academy of Medicine, Engineering & Science of Texas (TAMEST). He has served as a board member of the Greater Austin Crime Commission and the Training Advisory Board for the Office of the Texas Attorney General. Hamilton reached the rank of lieutenant commander and has served as the future plans officer for the Texas State Guard Maritime
Regiment and as the Deputy Director for Risk Assessment for the Texas Engineers Task Force on Homeland Security. He is a graduate of the Federal Bureau of Investigation Citizens’ Academy and a graduate of Leadership Austin.

Hamilton is certified in Homeland Security Level-V; American College of Forensic Examiners Institute; as a Firearms Instructor; Texas Commission on Law Enforcement; and Incident Command System (ICS), National Incident Management System (NIMS), and National Response Plan (NRP); and FEMA. He has been awarded the Texas Outstanding Service Medal (Texas State Guard), the Corporate Achievement Award (Radian), and an Exceptional Service in the Public Interest (FBI).

David R. Savage
Executive Director, ManTech Innovative Security Solutions Division

David Savage is an Executive Director for ManTech’s Innovative Security Solutions Division in San Antonio, TX. Mr. Savage serves as the Director of Operations and Account Manager for all cyber Research and Development (R&D) contracts in support of Intelligence Community (IC) and Department of Defense (DoD) customer missions within Texas, including ancillary support to associated R&D efforts worldwide. Mr. Savage came to ManTech after serving as a Federal Agent with the Air Force Office of Special Investigations (AFOSI), where he specialized in computer crime and international cyber counterintelligence (CI) investigations and operations. As a Criminal/CI Agent in AFOSI, Mr. Savage also focused on critical infrastructure and research/technology protection. Mr. Savage has a Bachelor’s Degree in Computer Science, a Master’s Degree in Information Technology Management, over 17 years of cyber security experience, and specializes in cyber warfare technology innovation, engineering, and development to support full spectrum cyber operations. Mr. Savage is a certified Program Management Professional (PMP), a Certified Information Systems Security Professional (CISSP), a Certified Scrum Master, an EnCase Certified Examiner (EnCE), and holds a Global Information Assurance Certification (GIAC) Reverse Engineering and Malware Analysis (GREM) certification.

Robert (Chipper) H. Cole
Civ, DAF, Executive Director, 24th Air Force (Air Forces Cyber)

Robert H. Cole is Executive Director, 24th Air Force, Air Combat Command, and Joint Base San Antonio - Lackland, Texas. In this position, Mr. Cole serves as the cyber plans, programming and policy advisor to the Commander in his/her role as the Air Force Network Operations Commander, Commander Air Forces Cyber and Commander Joint Force Headquarters-Cyber
Mr. Cole provides expert and high-level leadership for operations, especially on issues requiring broad-based and multi-disciplinary understanding of cyberspace policy, doctrine and capabilities. He leads and facilitates program planning and operations that require intensive collaboration among internal and external cyber partners to include Department of Defense and other Federal Government agencies, foreign allies and elements of Counterintelligence and the Defense Industrial Base.

Paula Gold-Williams
President, & CEO, CPS Energy

Paula Gold-Williams was named President, & Chief Executive Officer in July 2016 after serving nine months in an interim role. Since 2008, she has served CPS Energy as Group Executive Vice President - Financial & Administrative Services and Chief Financial Officer (CFO) & Treasurer for the nation's largest gas and electric municipal utility. She also has served in other capacities such as chief administrative officer and controller.

Gold-Williams joined CPS Energy in 2004 after holding various positions in several San Antonio businesses, including regional controller for TimeWarner Cable and vice president of finance for Luby's, Inc. Gold-Williams is a Certified Public Accountant and a Chartered Global Management Accountant. She earned an Associate of Fine Arts degree from San Antonio College, a Bachelor of Business Administration, with a concentration in Accounting from St. Mary’s University, and a Master of Business Administration, in Finance & Accounting from Regis University.

Audrey M. Dale
Chief of Cybersecurity Operations, NSA/CSS (Central Security Service) Cryptologic Center Texas

Ms. Audrey Dale has been leading the Cybersecurity Operations Group at NSA in Texas since August 2015. She began her career as a Communications Computer Systems Officer in the United States Air Force where she served for 20 years in a variety of Information Technology, Information Assurance (IA), computer security and management positions around the world. Since joining NSA in 2002, she has focused primarily on IA and cybersecurity technical and leadership roles. She served as the Director of the National Information Assurance Partnership where she managed the U.S. program that evaluates IT security products for conformance to the International Common Criteria Standard which is
mutually recognized across the governments of 30 different countries. She also worked in NSA’s Threat Operations Center defending Department of Defense networks and in the Information Assurance Directorate Engineering Group developing secure mobility solutions for government customers. She earned her Bachelor's degree from the University of Maryland at the Munich, Germany and College Park, MD campuses. She also completed her Master's degree in Industrial Technology through Texas A&M.

JoAnn Browning,
Dean and David and Jennifer Spencer Distinguished Chair, Dean of Engineering, Professor or Civil Engineering. Purdue University

Dr. Browning was named Dean and David and Jennifer Spencer Distinguished Chair of the UTSA College of Engineering in August 2014. Previously she was a faculty member at the University of Kansas for 16 years, and served 2 years as Associate Dean of Administration. While at KU, Dr. Browning twice was awarded the Miller Award for Distinguished Professional Service (2004 and 2011) and was the 2012 recipient of the Henry E. Gould Award for Distinguished Service to Undergraduate Education. In 2015 she was name a Purdue Distinguished Woman Scholar. In 2016 INSIGHT into Diversity magazine presented her with an Inspiring Women in STEM award. She received the San Antonio Business Journal Women’s Leadership Award in 2018.

Dr. Browning has been active in the engineering community, as President of the Kansas Chapter of the American Concrete Institute (ACI), Earthquake Engineering Research Institute (EERI), and the American Society of Civil Engineers. She has served on the Board of Directors of ACI and on the ACI 318 Building Code Committee.

Her own research interests include structural engineering, earthquake engineering, engineering materials, reinforced concrete design and analysis, and engineering education. She received the American Concrete Institute’s Young Member Award for Professional Achievement in 2008 and was named an ACI Fellow in 2009. Browning is a Professional Engineer in the states of Kansas and Texas.

Frederick R. Chang
Dept. of Computer Science, SMU

Dr. Frederick R. Chang is Professor and Chair of the Department of Computer Science at Southern Methodist University (SMU) and the Bobby B. Lyle Centennial Distinguished Chair in Cyber Security. He is also the Executive Director of the Darwin Deason Institute for Cyber Security at SMU and is a Senior Fellow in the John Goodwin Tower Center for Political Studies in
SMU’s Dedman College. He is currently the Co-Chair of the Intelligence Community Studies Board of the National Academies of Sciences, Engineering and Medicine and has served as a member of the Computer Science and Telecommunications Board of the National Academies. Additionally, he served as a member of the Commission on Cybersecurity for the 44th Presidency. He is the lead inventor on two U.S. patents and has appeared before Congress as a cybersecurity expert witness on multiple occasions. He is a former Director of Research at the National Security Agency and has been awarded the National Security Agency Director’s Distinguished Service Medal. Dr. Chang was elected as a member of the United States National Academy of Engineering in 2016.

Dr. Raymond J. Mooney

Dept. of Computer Science, UT Austin

Raymond J. Mooney is a Professor in the Department of Computer Science at the University of Texas at Austin. He received his Ph.D. in 1988 from the University of Illinois at Urbana/Champaign. He is an author of over 170 published research papers, primarily in the areas of machine learning and natural language processing. He was the President of the International Machine Learning Society from 2008-2011, program co-chair for AAAI 2006, general chair for HLT-EMNLP 2005, and co-chair for ICML 1990. He is a Fellow of AAAI, ACM, and ACL and the recipient of the Classic Paper award from AAAI-19 and best paper awards from AAAI-96, KDD-04, ICML-05 and ACL-07.

Daniel Hernandez

Vice President, Data Analytics and AI

As Vice President of IBM’s Data and AI business, Daniel G. Hernandez is the head of products for the company’s Hybrid Data Management, Unified Governance & Integration, and AI businesses. Daniel’s team is responsible for the strategy, roadmap, and overall performance for IBM Cloud Private for Data, Watson Studio, Watson Machine Learning, Db2, Integrated Analytics System, Informix, Information Server, Data Replication, MDM, Optim, StoredIQ, SPSS, and Decision
Optimization offerings. Major releases and partnerships during his tenure include IBM Cloud Private for Data, the Hortonworks, Mongo, and Actifio partnerships, and several offerings that have won Red Dot Awards for Design.

Before his current role, Daniel launched IBM’s data & analytics-as-a-service portfolio and led IBM’s Unified Governance & Integration business. He made critical contributions to IBM’s core franchises such as Enterprise Content Management, helped acquire companies like i2, Curam, and StoredIQ, and launched and scaled several organically grown businesses. Daniel graduated with a bachelor’s from the University of Texas at Dallas and a graduate degree from the University of Texas at Austin. He has two kids, lives in Austin with his wife, daughter, and two dogs, and sends a lot of his money to pay for his son’s education at Baylor University.

Angel Diaz
VP of Developed Technology, Open Source, & Advocacy, IBM

Dr. Angel Diaz is IBM’s VP of Developer Advocacy and Technology, his passion is to leverage technology to drive positive change. Specifically to empower developers to solve the world’s problems – smarter, faster, together – all in the open source world. Prior to this role, as IBM’s VP of Cloud Technology and Architecture, Angel and his team were responsible for the technology, architecture and strategy behind IBM’s Hybrid, open and secure cloud – empowering our clients with a new way to work. When he’s not working to bring greater value to clients through a flexible & interoperable cloud, he’s IBM’s leader for open technology where he is spearheading an industry IT renaissance driven by open source code, community and culture. A master of the art-of-the-possible, Dr. Diaz has been the driving force behind many of the most important Cloud, Data and Mobile open technology industry movements – all focused on enabling innovation that is built on simple, practical solutions. With a career rooted in IBM Research, building the standards upon which the web runs, and having successfully lead both business & development teams at IBM, Dr. Diaz has a unique perspective on technology’s effect on today’s opportunities. In those rare moments of stillness, you might find Dr. Diaz vanquishing his foes with his guild and daughter across Azeroth, Overwatch to name a few.

T.J. Wojnar, Jr.
Vice President for Corporate Strategic Planning, ExxonMobil Corp
T.J. Wojnar is Vice President of Corporate Strategic Planning for Exxon Mobil Corporation (ExxonMobil). In this role, he oversees all of the corporation’s strategic planning activities and the development of its Energy Outlook, ExxonMobil’s assessment of global energy trends.

Mr. Wojnar has had a diverse career at ExxonMobil across a range of assignments with varying geographic, business and technical scope. He has worked in refineries in Argentina and the United Kingdom, overseen the execution of large capital projects in Asia Pacific, and directed marketing and operations for Chemicals in Europe, Middle East, and Africa. He has had managerial assignments in R&D, IT, planning and marketing, and was project executive for a program to globally harmonize the work processes across the ExxonMobil Chemical Company. Followed by several senior leadership positions within the ExxonMobil Chemical and Downstream businesses. Prior to assuming his current role, Mr. Wojnar served as President of ExxonMobil Research & Engineering, responsible for corporate research, fuels and lubricants technology and refining/chemical capital project execution.

He earned a bachelor’s degree in civil engineering at Rensselaer Polytechnic Institute, as well as an MBA from the University of Houston. He serves as a member of Rensselaer Polytechnic Institute’s Annual Giving Leadership Council.

He was born in Troy, New York, grew up in five different states, and has lived with his wife and three children in New Jersey, Texas, and Virginia as well as overseas in Belgium and the U.K.

Gene Cilento
Glen H. Hiner Dean, and Professor of Chemical and Biomedical Engineering, Benjamin M. Statler College of Engineering and Mineral Resources, West Virginia University

Gene has served as Dean of the Statler College since 2001. WVU is a public, comprehensive, multi-campus, land-grant University with R1 status. He has been a faculty member in Chemical Engineering since 1979 and previously served as department chair from 1988-99. He was also on the research faculty in the School of Medicine until 2013. He has a BS degree in chemical engineering from Pratt Institute in Brooklyn, NY, and MS and PhD degrees in chemical engineering from the University of Cincinnati. Cilento has served on numerous committees for the university and for professional societies and is currently active in the ASEE Engineering Deans Council, including serving as chair of the deans Engineering Data Committee.
He was co-PI on a Sloan Foundation grant to ASEE to develop its engineering retention and assessment tool.

Joseph J. Rencis  
**Dean of Engineering, Professor of Mechanical Engineering, California State Polytechnic University, Pomona**  
2015-16 ASEE President

Dr. Joseph J. Rencis is a first-generation college graduate, receiving his A.A.S. and B.S. degrees in architectural and building construction engineering technology from Milwaukee School of Engineering, his M.S. from Northwestern University, and Ph.D. from Case Western Reserve University in civil engineering.

From 1985 to 2004 Dr. Rencis was at the Worcester Polytechnic Institute where he served as assistant, tenured associate, tenured professor of mechanical engineering, and director of Engineering Mechanics. In 2004 he joined the University of Arkansas, Fayetteville where he was department head and the inaugural Twenty-First Century Leadership chair, and tenured professor in mechanical engineering. Starting in 2011 Dr. Rencis was at Tennessee Technological University. He served as tenured professor of mechanical engineering, dean of the College of Engineering, and the inaugural Clay N. Hixson chair for Engineering Leadership. Since 2017, he has served as a tenured professor of mechanical engineering and dean of the College Engineering at Cal Poly Pomona.

Dr. Rencis has published over one hundred and fifty journal and conference articles, and his research has been supported by National Science Foundation and industry. He is an associate editor or editorial board member for five journals. He is a fellow of the American Society for Engineering Education (ASEE), American Society of Mechanical Engineers (ASME), and Wessex Institute of Great Britain.

He has served as ASEE President-Elect, President, Immediate Past President, and also on the ASEE Board of Directors. He is currently serving as a chair or member for four ASEE committees. Previously, he was a member, chair, or vice chair of four other ASEE committees or councils, and a member of one ASME committee. He has been a ABET program evaluator and has conducted reviews of new M.S. and Ph.D. programs. He has served on university and high school advisory boards, and is a recipient of six ASEE awards.

Donald J. Leo  
**Dean, University of Georgia**

Donald Leo became the first appointed Dean of the University Of Georgia College Of Engineering on July 1, 2013 and currently holds the UGA Foundation Professorship in Engineering. The UGA College of Engineering is the newest college in the oldest state-chartered
university in the nation. Formed in 2012, the college enrolls over 2,200 undergraduate and graduate students, has 75 faculty members, instructors, and public service professionals, and 40 staff members. Prior to joining the University of Georgia he was a faculty member and associate dean in the College of Engineering at Virginia Tech and a vice president for the Virginia Tech National Capital Region. He also served as a program manager at DARPA in the Defense Sciences Office from 2005-2007. He is a Fellow of the American Society of Mechanical Engineers and a Member of the American Society for Engineering Education. He received his Bachelor’s degree from the University of Illinois – Urbana, Champaign in 1990 and his Master’s and Doctoral degrees from the University of Buffalo in 1992 and 1995, respectively.

**Joseph Roy**  
**Director, Institutional Research & Analytics**  
**ASEE**

Joe has a B.S. in computer science and M.S. in statistics from the University of Texas at San Antonio and a Ph.D. in linguistics from the University of Ottawa. Prior to the ASEE, he was at the American Association of University Professors where he was the Senior Researcher/Senior Program Officer who directed their national faculty salary survey. Previously, he was at the University of Illinois Urbana-Champaign, as a Linguistic Data Analytics Manager. He retains a professional track faculty affiliation with the School of Literatures, Cultures and Languages, and is a member of the graduate faculty at the University of Illinois.

**Joseph Helble**  
**Provost and Dartmouth- 2014 NAE Gordon Prize Winner**

Joseph J. Helble was appointed Provost of Dartmouth College in May 2018. Formerly the Dean of Dartmouth’s Thayer School of Engineering, Helble brought national prominence to the school, making it a national leader in educating women in engineering, and creating the first engineering PhD innovation program in the country to prepare doctoral candidates for entrepreneurial success.
He is a co-recipient of the National Academy of Engineering’s 2014 Bernard M. Gordon Prize for Innovation in Engineering and Technology Education for the design and implementation of Dartmouth’s Engineering Entrepreneurship Program (which includes the PHD Innovation Program), and is a Fellow of the American Association for the Advancement of Science (AAAS).

Helble received his BS in chemical engineering from Lehigh University, and his PhD in chemical engineering from MIT.

**John D. (Danny) Olivas**  
**Special Advisor to the Dean, Former NASA Astronaut**

Dr. Olivas is the first alumnus of The University of Texas at El Paso (UTEP) to become a NASA astronaut. He is presently the Special Advisor to the Dean of Engineering and an adjunct professor in the Department of Metallurgy, Materials, & Biomedical Engineering at UTEP.

Dr. Olivas is the founder of the Center for the Advancement of Space Safety and Mission Assurance Research (CASSMAR), which focuses on risk assessment, reduction, and mitigation in commercial space flight. The center conducts studies in the areas of orbital debris monitoring, tracking, modeling, and characterization, with UTEP researchers in place at NASA Johnson Space Center. Other areas of research include hypervelocity impact studies and oxygen-enriched studies.

As part of CASSMAR, Dr. Olivas oversees the loan of over 2000 pounds of artifacts from the Space Shuttle Columbia disaster. These artifacts serve as a research base for the continued forensic analysis of the debris, uncovering numerous previously uncharacterized effects on common aerospace alloys due to the extreme environment of reentry. These findings have been resourced as part of the current efforts by government and private organizations to return human space flight to American soil.

**PJ Boardman**  
**Director, Education Marketing, MathWorks**

P.J. Boardman is the Director of Education Marketing, managing a worldwide education marketing team responsible for product and technology strategy, publishing programs, online learning and digital marketing from K-12 through higher education. She is a member of the American Society for Engineering Education (ASEE) Corporate Membership Council for P12 Education. Prior to joining MathWorks in 2014, P.J. was a Vice President of Cengage Learning and Pearson.
Education. P.J. has a B.A. in Mathematics from the College of the Holy Cross and an MEd from the University of Massachusetts in Instructional Design and is a Rotary International Ambassadorial Scholar where she attended the Universidad de Santiago, Santiago de Compostela, Spain.

Dora Smith  
**Senior Director of Global Academic Programs, Siemens**

Dora Smith is the senior director of the global academic program for Siemens PLM Software, a business unit of Siemens Digital Factory Division. Under Dora’s leadership, the global academic program is now a company-wide strategic initiative for the company. The program empowers the next generation of digital talent through project-based learning, STEM competitions and industrial strength software and curriculum to support more than 1 million students and more than 3,000 institutions worldwide.

Dora is an accredited business communicator with more than 20 years of experience. She has spent her career in the engineering and manufacturing industry with leadership roles across disciplines. Previously, she held executive management positions at CAD Potential (now part of Tata Technologies), where she developed the company’s first academic and certification programs. Prior to that, she directed the Unigraphics Users Group (now PLM World) an independent, not-for-profit organization supporting the engineering community. She also served as president on the board of directors of IABC St. Louis. Dora earned her bachelor’s degree in journalism from the University of Missouri-Columbia and a master’s degree in business administration from Washington University.

Andy Bell  
**Director of Academic Programs at National Instruments**

Andy Bell is the Director of Academic Programs at National Instruments where he leads a team whose mission is to empower discovery in undergraduate classrooms, graduate-level studies, and advanced research. He has held previous roles at National Instruments in both educational and engineering capacities. He previously served as the Director of Innovation at LEGO Education where he focused on the development and improved use of robotics technology in STEM education. Mr. Bell earned his Bachelor of Science in Mechanical Engineering at the Georgia Institute of Technology and a Certificate in Integrative STEM Education from Virginia Polytechnic Institute and State University. Mr. Bell has served on numerous advisory boards
including ECEDHA, ASEE, and SREB. He currently serves on the Board of Directors of the Thinkery, a nonprofit STEM organization.

**Tammy Stevens**  
*Corporate Manager of University Relations and D&I initiatives, Northrop Grumman Corporation*

Tammy Stevens is Corporate Manager of University Relations and D&I Initiatives. She has been in her current role at Northrop Grumman Corporation for three years. Previously she spent eight years at the Massachusetts Institute of Technology (MIT) as the Associate Dean in the Office of Minority Education. In addition, she has years of professional experience in consulting and finance with PwC, Microsoft and Capitol One. Growing up in Syracuse, NY Tammy developed her initial passion for inclusion and equity. Tammy holds two bachelor’s degrees from MIT in Materials Science and Engineering and Management Science, an MBA from the Smith School at the University of Maryland, College Park, and in May 2018 received an EdD in Organizational Change and Leadership from the University of Southern California (USC). Tammy’s dissertation focused on creating an inclusive culture in technology.

**Winston F. Erevelles**  
*Winston F. Erevelles is a Professor of Engineering and the Dean of the School of Science, Engineering, and Technology at St. Mary’s University in San Antonio, TX. Dr. Erevelles joined St. Mary’s in 2009 after spending close to 20 years at Kettering University in Flint, MI and Robert Morris University in Pittsburgh, PA. He serves as an Adjunct Accreditation Director of the Engineering Accreditation Commission (EAC) of ABET. Dr. Erevelles served on the EAC and its Executive Committee from 2004-15 and served as Chair of the EAC in 2013-14. He has served as a Manufacturing Engineering Program Evaluator for EAC/ABET from 1997 – 2009 and was a member of SME’s Accreditation Committee.*

**Jeff Ray**  
*Western Carolina University*  

Jeffrey L. Ray is the Dean of the College of Engineering and Technology at Western Carolina University and Professor of Mechanical Engineering. Prior to joining Western Carolina, Dr. Ray was Dean of the School of Engineering Technology and Management at Southern Polytechnic
State University, now Kennesaw State University. Before moving to Southern Poly, he was the Director of the School of Engineering and Professor of Mechanical Engineering at Grand Valley State University for ten years, in addition to leading the multidisciplinary industry-sponsored capstone design program.

Dr. Ray received his bachelor’s and master’s degrees in Mechanical Engineering from Tennessee Technological University and his Ph.D. in Mechanical Engineering from Vanderbilt University. Prior to his engineering studies, he completed an apprenticeship and received his Journeyman Industrial Electrician license.

Dr. Ray has been involved at various levels of ASEE leadership, including the Board of Directors, VP of Institutional Councils, and the current Co-Chair of the EDC’s Undergraduate Experience Committee, and many other ASEE positions. He was elected to Fellow grade in 2014. Additionally, he has been an active member of ABET’s Academic Advisory Council since its founding and currently serves as the Chair.

Richard Tapia
University Distinguished Professor, Rice University

Richard A. Tapia, University Professor and Maxfield-Oshman Professor of Engineering, Rice University was born in Los Angeles to parents who emigrated from Mexico when they were children, seeking educational opportunities. He was the first in his family to attend college, earning his B.A., M.A., and Ph.D. degrees in mathematics from the University of California, Los Angeles. Due to his efforts, Rice University has received national recognition for its educational outreach programs, and the Rice Computational and Applied Mathematics Department has become a national leader in producing women and underrepresented minority Ph.D.s in the mathematical sciences.

Dr. Tapia’s major research contributions have been in the area of computational optimization, both linear and nonlinear programming, where he pioneered the exploration and settlement of the important computational methods in numerical optimization known as primal-dual interior point methods. Tapia has authored or co-authored two books and more than 100 mathematical research papers, and is currently authoring a graduate level textbook on the foundations of optimization.

Dr. Tapia’s honors include: election to the National Academy of Engineering (1992) for his seminal work in interior point methods; being the first recipient of the A. Nico Habermann Award from the Computing Research Association (1994) for outstanding contributions in aiding members of underrepresented groups within the computing community; the Presidential
Award for Excellence in Science, Mathematics, and Engineering Mentoring from President Bill Clinton (1996); appointment by President Clinton to the National Science Board, the governing body of the National Science Foundation (1996); the Lifetime Mentor Award from the American Association for the Advancement of Science (1997); and the establishment of a lecture series to honor Dr. Tapia and African American mathematician David Blackwell at Cornell University (2000). The Richard Tapia Celebration of Diversity in Computing honors his many contributions to diversity (2001). He received the Hispanic Engineer of the Year Award from Hispanic Engineer Magazine in 1996, and was inducted into the Hispanic Engineer National Achievement Awards Conference Hall of Fame in 1997. Hispanic Engineer & Informational Technology Magazine also selected him as one of the 50 Most Important Hispanics in Technology and Business for 2004. That same year Dr. Tapia was inducted into the Texas Science Hall of Fame.

Dr. Tapia has been named one of 20 most influential leaders in minority math education by the National Research Council; listed as one of the 100 most influential Hispanics in the U.S. by Hispanic Business magazine (2008); and given the “Professor of the Year” award by the Association of Hispanic School Administrators, Houston Independent School District, and Houston, Texas. In 2005, Tapia was elected to the Board of Directors for TAMEST, comprising the Texas members of the National Academy of Engineering, National Academy of Sciences and the Institute of Medicine. In 2009, Tapia received the Hispanic Heritage Award for Math and Science. In 2011, President Obama named Dr. Tapia one of the recipients of the National Medal of Science, the highest honor bestowed by the United States government on scientists and engineers.

Tanner Huffman
Assistant Professor of Integrative STEM Education at The College of New Jersey and Director of the Advancing Excellence in P-12 Engineering Education (AEEE) Research Collaborative

Dr. Tanner Huffman is an assistant professor in the Department of Integrative STEM Education, School of Engineering at The College of New Jersey. Dr. Huffman has experience as a middle and high school engineering teacher with a focus on social relevance and empowerment. Along with colleagues from Purdue University and Baltimore County Public School, Dr. Huffman co-directs the Advancing Excellence in P-12 Engineering Education (AEEE) research collaborative (www.p12engineering.org). The AEEE research collaborative is an ongoing venture to promote collaboration across the engineering and
education community to first, pursue a vision and direction for P-12 Engineering Education; and second, to develop a coherent and dynamic content framework for the scaffolding of P-12 engineering teaching and learning. Dr. Huffman was the primary author of the AEEE technical report, *Engineering a National Imperative. Phase 1: Establishing Content & Progressions of Learning in Engineering*. Dr. Huffman has also served as a board member of the American Society of Engineering Education’s Precollege Engineering Education Division, as an advisor for Carnegie Mellon University’s CREATE Lab Satellite Network and as a committee member on the National Academy of Engineering project, Educator Capacity Building in PreK-12 Engineering Education.

**Cheryl Farmer**  
*Program Director and MSP Project Director, University of Texas, Austin.*

Ms. Farmer serves as Director of Precollege Engineering Education Initiatives for the Cockrell School of Engineering at The University of Texas at Austin. As the founding director of the NSF-funded *Engineer Your World* program, Ms. Farmer has led the development and growth of a curriculum that engages students from all backgrounds in experiential learning through engineering design; teacher professional development and support programs that enable success in a wide variety of classrooms; and a dual-enrollment opportunity that empowers students from across Texas (and beyond) to experience - and rise to - expectations for college-level coursework at UT’s school of engineering. Ms. Farmer is currently a member of the National Academy of Engineering’s panel on building educator capacity in K-12 engineering.

**Darryll Pines**  
*Dean, University of Maryland*

Dr. Darryll J. Pines currently serves as the *Nariman Farvardin Professor of Engineering* and Dean of the A. James Clark School of Engineering. As dean of the engineering school with over 6,000 students, Pines led the development and implementation of a strategy to improve teaching in fundamental undergraduate courses and raise student retention, achieve success in national and international student competitions, place new emphasis on service learning and grand societal challenges, promote STEM education among high school students, increase the impact of research programs, and expand philanthropic contributions to the school.
Pines is currently leading an initiative to pilot a first-of-its-kind, nationwide, pre-college course on engineering principles and design. The pilot program, Engineering For US All (E4USA), will test the effectiveness of a standardized educational curriculum across multiple states. The course, made possible through a $4 million NSF grant, is intended to eventually provide the equivalent of placement credit for an introductory college course.

Among his many awards are UMD’s 2018 President’s Medal, the State of Maryland House of Delegates Speaker’s Medallion in 2015, and various teaching awards, including two Department of Aerospace Broken Propeller awards and the Clark School’s E. Robert Kent Teaching Award for junior faculty.

Pines’s research focuses on structural dynamics, including structural health monitoring and prognosis, smart sensors, and adaptive, morphing, and biologically inspired structures, as well as the guidance, navigation, and control of spacecraft and uninhabited aerospace vehicles at all length scales.

He has published more than 250 technical papers and obtained six patents—U.S. and worldwide—in the areas of smart structures, structural health monitoring, micro air vehicles, navigation, guidance, and control of aerospace systems. Pines is a fellow of the Institute of Physics, the American Society of Mechanical Engineers, and the American Institute of Aeronautics and Astronautics and has received a NSF CAREER Award. Recently, he has been elected into the 2019 class of inductees to the National Academy of Engineering. Pines received a B.S. in mechanical engineering from the University of California, Berkeley. He earned M.S. and Ph.D. degrees in mechanical engineering from the Massachusetts Institute of Technology.

**Eugene Rutz**

**Academic Director, University of Cincinnati**

Eugene Rutz MS, PE serves as an Academic Director in the College of Engineering & Applied Science. Eugene’s responsibilities include overseeing the college’s eLearning initiatives including the high school engineering programs and the online graduate programs. Eugene was co-PI on an NSF Math and Science Partnership program and has served as PI, co-PI or investigator on a number of grants related to eLearning, learning styles and instructional technologyp
Kevin Moore

Dean, Colorado School of Mines

Kevin L. Moore is Vice Provost of Strategic Initiatives and the Dean of Integrative Programs at the Colorado School of Mines, where he was previously the Founding Dean of the College of Engineering and Computational Sciences. He is a licensed professional engineer, and ABET Program Evaluator, involved in several professional societies and editorial activities, and is interested in control systems and engineering education pedagogy, particularly capstone senior design.