



Engineering Technology Leaders Institute (ETLI) 2019

“Engineering Technology Leaders: Taking the Next Steps”

Speakers Biographies

Miriam Quintal, *Lewis-Burke Associates LLC*

Miriam Quintal, a senior Consultant at Lewis-Burke Associates, boasts a decade of advocacy and client success at Lewis-Burke, managing the federal relations portfolios for large academic institutions, scientific societies, and facility management organizations. Miriam fiercely protects client priorities, leveraging her unique combination of scientific training with political insight. Her wealth of knowledge and federal research enterprise acumen provides value to all components of client interests: supporting university leadership, shepherding research initiatives, and shaping policy across a range of issues. Recent advocacy efforts include successfully guiding large-scale science projects through the appropriations process, restoring funding for key programs proposed to be eliminated in the President’s budget request, establishing new agency funding for research infrastructure, and creating opportunities for clients to showcase research and leadership in Administration initiative areas. Miriam co-leads the firm’s National Science Foundation practice and works closely with the higher education and research advocacy community to champion the Foundation.

Bill Ruch, *Lewis-Burke Associates LLC*

Bill Ruch works closely with clients to develop and carry out targeted federal relations strategies across a diverse range of issue sets. Bill’s portfolio covers federal interests across the research and development

spectrum, from the social and behavioral sciences and STEM education models to the transition of applied technologies and advancement of workforce development strategies. His day-to-day can include providing in-depth analysis on federal trends, targeted advocacy on Capitol Hill and at federal agencies, and coalition building with relevant stakeholders to bolster messaging. Bill has a strong understanding of the complex issues associated with industrial transformation and he has assisted clients as they forge public-private partnerships and pursue regional economic development initiatives. This portfolio has expanded to include client support for all things related to the transfer of technologies from lab to market. Over time, Bill has also leveraged his personal interest in criminal justice to strengthen the firm's capabilities in domestic security. Through these efforts, Bill works closely with clients, federal agencies, and congressional leaders to ensure our nation's officers and first responders have access to technologies and evidence-based processes to effectively protect and serve.

Dr. Scott Dunning, P.E., C.E.M., ETC Chair, Professor and Director, School of Engineering Technology, University of Maine

Dr. Scott Dunning is a Professor of Electrical Engineering Technology and Director of the School of Engineering Technology at the University of Maine. He began his academic career in 1992 teaching course in electric machines and power systems analysis. His research area has been in applying energy efficient technology to industry. During his career, he has led over 200 industrial assessments recommending over \$11M in savings to industrial manufacturers. He led a startup program that funded a new \$6M facility for an advanced Manufacturing Center and he successfully led the center for six years. He has served as Director of the School of Engineering Technology at the University of Maine since 2007. He has continued to offer training around the globe in energy management providing workshops annually for the Association of Energy Engineers where he recently served as national president and is recognized as a Fellow of AEE. Scott has been active nationally contributing to engineering technology education since the late 1990s. He is active in accreditation issues serving as a volunteer for ABET first as a Program Evaluator, then as a Commissioner and recently completed his term as chair of the Engineering Technology Accreditation Commission (ETAC). He served in all the leadership positions of the Energy Conversion and Conservation Division (ECCD) as well as the Engineering Technology Division (ETD) for the American Society for Engineering Education (ASEE). He served as Program Chair for ETD at the ASEE Annual Meeting as well as the conference for Industry and Education Collaboration (CIEC) and hosted the Engineering Technology Leadership Institute (ETLI). He served two terms on the Engineering Technology Council as a Director and is the current Chair of the Engineering Technology Council.

Dr. Norman L. Fortenberry, ASEE Executive Director

Dr. Norman Fortenberry is the executive director of the American Society for Engineering Education (ASEE), an international society of individual, institutional, and corporate members founded in 1893. ASEE is committed to furthering education in engineering and engineering technology by promoting global excellence in engineering and engineering technology instruction, research, public service, professional practice, and societal awareness. Previously, Fortenberry served as the founding Director of the Center for the Advancement of Scholarship on Engineering Education (CASEE) at the National Academy of Engineering (NAE). He served in various executive roles at the National Science Foundation (NSF) including as senior advisor to the NSF Assistant Director for Education and Human Resources and as director of the divisions of undergraduate education and human resource development. He has also served as executive director of the National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (The GEM Consortium) and as a faculty member in the department of mechanical engineering at the Florida A&M University – Florida State University College of Engineering. He was awarded the S.B., S.M., and Sc.D. degrees (all in mechanical engineering) by the Massachusetts Institute of Technology.

Dr. Stephanie G. Adams, *ASEE President, Dean, the University of Texas at Dallas*

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

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

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

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

Dr. Richmond Nettey, Ph.D., President, ATMAE Safety Division and Professor, Kent State University

Dr. Richmond Nettey is a tenured professor who serves as the Associate Dean of the College of Aeronautics and Engineering (March 2007–present) at Kent State University where he served as the Senior Academic Program Director of Aeronautics (July 2001–Sept. 2008). He served as president and treasurer of the University Aviation Association in 1997-1998 and 1995-1996, respectively, and as a trustee of the Council on Aviation Accreditation, d.b.a. Aviation Accreditation Board International (AABI) from 2004 through 2007. Prior to his work at Kent State University, Nettey served as the Director of Airway Science at Texas Southern University in Houston for 13 years (1988–2001), and in the airport operations division of airport management at Houston Bush Intercontinental Airport (1986–1988). Nettey serves as an airport management consultant for the Houston Airport System (1999–present) and has served as a consultant for the FAA to review Airway Science Programs (1992–1997) and as a subject matter expert for the Department of Homeland Security in education and training materials for general aviation.

Dr. Frederick C. Berry, Co-Director of Purdue's Center for Technology Development

Dr. Frederick Berry received the B.S.E.E., M.S.E.E. and D.Eng. Degrees from Louisiana Tech University in 1981, 1983, and 1988 respectively. Dr. Berry is Professor in the School of Engineering Technology at Purdue University. Recent research has focused on 1) using writing and communication assignments to improve the teaching of engineering design and 2) developing a flexible mobile studio pedagogy using the Mobile Studio Instrumentation Board.

Michael Watkins, Global Director of Supply Chain Quality, Development & Processes, Regal Beloit Corporation

Mr. Michael Watkins is the Global Director of Supply Chain Quality, Development & Processes for Regal Beloit Corporation. Regal Beloit is a \$4B Wisconsin-based global manufacturer of electric motors and generator systems. Michael is also Chairman of the Advisory Board for the Department of Applied Engineering Technology in the College of Science and Technology at his Alma Mater N.C. A&T.

Jerad J. Pelotte, TRC Power Sector, Electrical Engineering Manager

Mr. Pelotte has over twenty years of experience in electrical power system engineering and consulting. He started at TRC as an Intern in 1998 and hired full time in 1999. He was promoted to System Protection Engineering Manager in 2011 and in 2017 promoted to his current position managing the Electrical Engineering department. Mr. Pelotte's qualifications include extensive experience in project engineering, protection and control engineering, integration/automation, smart grid design and programming, testing and commissioning, project management, protective relay settings and construction supervision. As the lead electrical engineer on many large scale projects, he provides the technical and managerial direction to the engineering teams.

Dr. Alok K. Verma, *Professor, Old Dominion University*

Dr. Alok Verma is Ray Ferrari Professor in the Engineering Technology Department at Old Dominion University. Dr. Verma received his B.S. in Aeronautical Engineering from the famed institution IIT Kanpur, M.S. in Engineering Mechanics and Ph.D. in Mechanical Engineering from ODU. Prof. Verma is a licensed Professional Engineer in the state of Virginia, a certified manufacturing engineer and has certifications in Lean Manufacturing and Six Sigma. He has organized several international conferences as General Chair, including ICAM-2006 and ICAM-1999, and also serves as associate editor for three International Journals. Dr. Verma's scholarly publications include more than 87 journal articles and papers in conference proceedings and over 50 technical reports. He has served as a PI or Co-PI on several funded competitive grants exceeding \$4.0 million from agencies like NSF, DOE, NSRP etc. He is well-known internationally and has been invited to deliver keynote addresses and invited papers at more than 12 national and international conferences. Dr. Verma has received the Isadore T. Davis award from the American Society for Engineering Education (ASEE) for bringing industry and academia together, Regional Alumni Award for Excellence for contribution to Lean Manufacturing research, International Education Award at ODU and Ben Sparks Medal by the American Society of

Mechanical Engineers (ASME). He is active in ASME, American Society for Engineering Education (ASEE), Society of Manufacturing Engineers (SME), and Institute of Industrial Engineers (IIE). Dr. Verma has served the Hampton Roads community as a board member of several non-profit organizations like Norfolk Sister City Association, World Affairs Council and Asian Indians of Hampton Roads. He served three terms as President of Asian Indians of Hampton Roads and continues to serve as chair of public relations. For his services to the community, he was recently awarded the Humanitarian Award by the Virginia Center for Inclusive Communities (VCIC).

Adam Shapiro, *CEO/President ASPR LLC*

Mr. Adam Shapiro is an accomplished public relations professional who brings a unique combination of experience to the table. His initial work involved serving as a broadcast journalist whose award-winning stories have appeared on CNN, CNN International, CNBC, Headline News, and NBC television stations. His reporting can be found in the Investigative Reporters & Editors [archives](#). Shapiro's other specialties involved education, public policy and politics. His coverage of the Michigan Air National Guard's role in Operation Deny Flight over Bosnia received the Edward R. Murrow award from the Radio-TV News Directors Association.

Dr. Ken Burbank, *Professor and Chair, Department of Engineering Technology, Purdue University*

Dr. Ken Burbank entered the world of manufacturing after graduating from Brown University. He went from Process Engineer to Section Head for Process Development, all in the analog integrated circuit industry. After 10 years in industry, he went "back to school", and has been teaching in Engineering and Engineering Technology programs since. While in Rhode Island, he taught Electronics Engineering Technology and participated in thin film device research. After moving to Virginia and then North Carolina, his role became program development and leadership. Interfacing the University with the engineering community has become a passion, and he has been active in local sections of SME and IEEE.

Dr. Burbank came to Purdue in 2011 as the Department Head for the Department of Electrical and Computer Engineering Technology. This department merged with the Mechanical Engineering Technology department, such that Dr. Burbank is now the Head for the School of Engineering Technology. At the national level, Dr. Burbank has served as an officer of the Engineering Technology Council of ASEE for the past eight years and is an active voice in the ongoing Engineering Technology National Forum on the roles of engineering technology graduates. Dr. Burbank is a senior member of IEEE and a member of ASEE. Dr. Burbank received his B.S., M.S. and Ph.D. degrees in Electrical Engineering, all from Brown University.

Both his M.S. and Ph.D. research efforts were centered on the optical and electrical properties of compound semiconductors.

Dr. Ron D. Dempsey, President, Oakland City University in Indiana

Dr. Ron Dempsey has spent his career in higher education with over 30 years of experience as a faculty member, an academic dean, a strategic planner, and a successful fundraiser. He currently serves as president of Oakland City University, a private faith-based institution in southwest Indiana. Dr. Dempsey's expertise in engineering technology stems from his doctoral research at Georgia Tech where he examined the role of engineering technology as a pathway for African Americans into the field of engineering. He has contributed to the recent NAE publication on Engineering Technology, published in the Bridge, and presented at several conferences on his dissertation topic and the future of engineering technology.

Dempsey received his Bachelor of Arts (Psychology) from Wake Forest University, North Carolina; his Master of Arts (Sociology) from the University of Louisville, Kentucky; his Master of Science (History and Sociology of Science and Technology) from the Georgia Institute of Technology; a Ph.D. (Sociology of Religion) from Southern Baptist Theological Seminary, Louisville, Kentucky; and a Ph.D. (Sociology of Science and Technology) from Georgia Institute of Technology. Dempsey's interest in engineering technology originated while serving Southern Polytechnic State University as its Vice President for University Advancement.

Dr. Adrienne R. Minerick, Professor and Dean of College of Computing and former Dean of the School of Technology, Michigan Technological University

Dr. Adrienne Minerick received her B.S. from Michigan Tech and her M.S. and Ph.D. from the University of Notre Dame. In her technical research, she directs the Micro Medical Device Engineering Research Laboratory (M.D. - ERL) and is Chief Technology Officer at a start-up company Micro Device Engineering Inc. (MDE). Her passion is in championing for any marginalized individuals and groups which led to her role as a former Chair of what is now ASEE's Committee for Diversity, Equity and Inclusion. She also served as PIC I Chair and First Vice President on the American Society for Engineering Education (ASEE) Board of Directors. On the Michigan Tech campus, she is PI of an NSF ADVANCE effort to empower women and underrepresented minority faculty throughout their careers. Adrienne is a former President of the AES Electrophoresis Society, fellow of the American Association for the Advancement of Science (AAAS), and fellow of the American Society for Engineering Education (ASEE).

Dr. Anthony M. Ponder, Dean, Science, Mathematics and Engineering, Sinclair Community College

Dr. Anthony Ponder has served as Dean of the division of Science, Mathematics & Engineering (SME) at Sinclair Community College since August of 2012. The SME division employs more than 130 full time faculty and staff and offers more than 60 certificate and degree programs in high tech, in-demand areas such as aviation, automotive technology, biotechnology, engineering technology, manufacturing, and unmanned aerial systems.

Sinclair is one of only 10 community colleges in Ohio approved to offer registered apprenticeship programs. These apprenticeship programs are designed to meet industry needs in areas such as machining, HVAC-R, and automation and controls technology with robotics. Apprenticeship programs allow students to apply the theoretical and applied knowledge they learn in the classroom with real-world, on the job training. The result is a more engaged learner and employee that is able to more quickly integrate into the “culture” of his or her employer. Through Dr. Ponder’s leadership and the efforts of his faculty and staff, in less than 1 year, the SME division has implemented 5 registered, apprenticeship programs employing 19 apprentices.

Prior to serving as Dean, Dr. Ponder served as the Mathematics Department Chair at Sinclair from 2007 - 2012; after having attained the rank of Professor in 2005. Dr. Ponder holds a Bachelor’s of Science in Mathematics Education from The Ohio State University, a Master’s of Education with an emphasis in Mathematics from Wright State University, and a Doctorate in Community College Leadership from Ferris State University. While serving as a Professor at Sinclair, Dr. Ponder received the Division Merit Award for Excellence in Teaching in 2010 & 2011, the Nia (Swahili word meaning purpose) Award for Distinguished Faculty in 2010, and the College-wide Merit Award for Excellence in Teaching in 2008 & 2009.

Dr. Edem G. Tetteh, Dean, Division of Science, Technology, Engineering, and Mathematics (STEM), Rowan College at Burlington County

Dr. Edem Tetteh, served as Dean of Academic Affairs at Potomac State College of West Virginia University, Assistant Vice President for Academic Affairs and Associate Professor at Paine College. He has held a faculty position in the Industrial and Logistics Technology (INLT) program in the Department of Technology at Virginia State University. His educational background includes a B.S. in Manufacturing Systems and a M.S. in Industrial Engineering both from North Carolina Agricultural and Technical State University. He also completed his Ph.D. in Technology from Purdue University, West Lafayette. Dr. Tetteh is also a prestigious author of several

books and publications in the area of ergonomics and human factors, logistic and supply chain, quality management and process efficiency. He has received numerous educational grants and applied research projects with currently serving as CO-PI on an NSF-ATE project. He is actively involved in professional associations such as ATMAE, ABET, ASEE, and IIE.

Dr. Clay Gloster, Jr., Interim Vice Provost for Research, Graduate Programs and Extended Learning at NC A&T

Dr. Clay Gloster, currently serves as the Interim vice Provost for Research, Graduate Programs and Extended Learning at NC A&T. He currently serves as the Chair of the Engineering Technology Division (ETD) of the American Society for Engineering Education (ASEE). He received the B.S. and M.S. degrees in Electrical Engineering from North Carolina A&T State University ('85,'88) and the Ph.D. degree in Computer Engineering from North Carolina State University ('93). His current research grants focus on: high performance reconfigurable computing and broadening participation of minorities in science, engineering, and engineering technology. He currently leads the Verizon Innovative Learning project at NCA&T which has impacted more than 1100 minority middle school males. Dr. Gloster holds two US patents.

Dr. Massoud Moussavi, P.E., Professor and Department chair of the department of Electromechanical Engineering Technology at California State Polytechnic University

Dr. Massoud Moussavi has over 30 years of teaching Photonics, Data & Optical communication, Analog & Digital control systems, and other electronic courses at technical schools, community colleges, and university levels. His research area included; photonics, optical devices & systems, and control systems. He has served as Department Chair of Engineering Technology Department at CalPoly-Pomona and was instrumental to update & upgrade the curriculum of the both electronic and mechanical programs and rename department name and both programs that has attracted tremendously the attention of the high school and community college students.

He has presented and published over 30 papers on engineering education, photonics, and control systems. He has developed training materials, instructional design, and trained new employees of some High-Tech companies such as EMC² & Nortel. He has served ETAC-ABET as a program evaluator and the American Council on Education (EAC) for military course evaluation. He has also served as a member of planning committee for the Chair Conclave and ETLI.

Martin (Marty) Gordon, P.E., D.F.E., Professor, *Rochester Institute of Technology*

Prof. Martin E. Gordon, Professor and Director of External Academic Relations, College of Engineering Technology, Rochester Institute of Technology, is founder and president of Gordon Engineering PC and is the Immediate-Past president of the National Academy of Forensic Engineers.

Gordon is a Registered Professional Engineer in New York and Texas and is a board-certified forensic engineer. He is a nationally recognized expert in the field of forensic engineering and traffic accident reconstruction. Professor Gordon has also been recognized for his teaching excellence - sharing his knowledge with thousands of aspiring engineers as a professor at the Rochester Institute of Technology.

During his 25-year career at RIT, Gordon has developed and taught courses in the fields of mechanical engineering and crash reconstruction. He has been the RIT Baja SAE advisor since 1995 and is the only six-time Baja SAE event Chief Organizer.

Gordon has been actively involved in establishing a pathway to licensure for baccalaureate graduates of ETAC/ABET accredited Engineering Technology programs. He sits on the ASEE ETC board and recently served as a consultant to the NCEES Education Committee. He has been nominated to be on the New York State Board of Professional Engineers, Surveyors and Geologists.

Professor Gordon also leads his own forensic engineering firm, Gordon Engineering PC, which provides forensic engineering consulting services. Martin has been involved as an expert in nearly 200 criminal and civil cases involving traffic crash reconstruction, machinery accidents and product liability.

Dr. Robert (Rob) S. Weissbach, *Chair and Associate Professor, Indiana University Purdue University*

Dr. Rob Weissbach received the Ph.D. degree in Electrical Engineering from Arizona State University, Tempe, AZ, USA, in 1998. He is currently the Chair of the Department of Engineering Technology, Indiana University—Purdue University Indianapolis, Indianapolis, IN, USA. Previously, he was an Associate Professor of Engineering at Penn State Behrend and has also worked on the design and testing of submarine turbine generator sets for General Dynamics Electric Boat Division. His research interests include renewable energy, energy storage, and engineering education. He is licensed as a Professional Engineer in Pennsylvania.