

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

POLICY AND GLOBAL AFFAIRS DIVISION

Board on Higher Education and Workforce

SPEAKER BIOS (in alphabetical order by last name)

Dillard University Virtual Town Hall: Successes in STEM Education, Research, and Workforce Preparedness

Webcast Live Here: <https://www.nationalacademies.org/event/02-22-2022/dillard-university-virtual-town-hall-successes-in-stem-education-research-and-workforce-preparedness>

February 22, 2022 | 1:00PM - 3:30PM EST

Lovell Agwaramgbo, Ph.D., *Professor of Chemistry; Chair, School of Science, Technology, Engineering, and Mathematics, Dillard University*

Lovell O. E. Agwaramgbo is a tenured and endowed professor of chemistry. He received his BS from Virginia Union University in Richmond, Virginia and his Masters and Doctorate in organic chemistry from Howard University in Washington DC. He currently serves as the Chair of the School of Science, Technology, Engineering, and Mathematics since 2012 and the Faculty Senate President. Additionally, he serves as the Project Director for the Verizon Innovative Learning Program for Minority Males (2017-Present) and Sherman Fairchild Undergraduate Summer Research Program. In search of an innovative teaching approach and career pathway for chemistry majors, he developed a chemical formulation course, an interdisciplinary course that exposes students to cosmetic, lotion, cream, hand sanitizer, bleach, soap, and detergent formulation to ignite interest in science and entrepreneurship. He has served as the chairman of the Chemistry Department from 2005-2011. He is interested in (1) Advancing civic engagement through community collaboration on environmental assessment of heavy metal and oil contamination and enhancing research and awareness on the environmental consequences of pollution on our food, water, and soil safety with funding from Gulf Coast Funds for Community Renewal and Ecological Health and Mitsubishi Corporation Foundation for the Americas (2) developing a multidisciplinary advanced teaching and research program at the undergraduate level that strongly integrates direct service of science to the people into academic research investigations of (a) agricultural waste in soil and water remediation of arsenic contaminated rice farm and lead contaminated community gardens. (b) Assessment of Utility Poles as sources of Arsenic contamination in the communities (c) A 15 year longitudinal temporal changes in Arsenic contamination in Louisiana. His academic career includes academic and summer interludes at Federal University of Technology Owerri, Imo State, Nigeria. (visiting Professor 2014, Sabbatical Leave position, 2015-2016; summer research faculty at the Army Environmental Research & Development Center in Vicksburg, MS (Phytoremediation); and examination of silicon directed reactions at the Computational Center for Molecular Structure and Interactions (CCMSI) at Jackson State University in Jackson, MS. He is strongly interested in establishing Science in the Community as a way of advancing collaboration in research and teaching with the community. Dr. Agwaramgbo has published several journal articles with his students as co-authors.

Dr. Ruby Broadway, *Professor of Biology, Dillard University*

Dr. Ruby Broadway is a Professor at Dillard University in New Orleans, Louisiana. During her 35-year tenure at Dillard, she has served as a mentor and chair of the biology department. She has also served

as a program director for the university's Minority Access to Research Careers and Minority Biomedical Research Science Program (an undergraduate honors training program funded by NIH's National Institute of General Medical Sciences that provides advanced curriculum, academic and professional development, and year-round lab-based research training in order to increase the pool of well-prepared minority undergraduate students who can successfully compete for positions in top biomedical and behavioral graduate research programs). She is the Program Director for the Undergraduate Research Improvement Science Education U-RISE program. She currently serves as program director of the NSF-GEOPATH, Deeper Student Learning Phase I and II program funded by the Department of Education; Saturday Science Academy (an enrichment program for students in grades 3-8 who have taken an interest in science, technology, engineering, and math), the Young Scholars Environmental Camp (the Young Scholars Environmental Camp is designed to meet the unique needs and interests of children and youth. Young campers will participate in their favorite sports promoting health and the development of important social skills; explore environmental interests that could lead to rewarding careers; get an early taste of college life and the value of academic achievement; engage in dynamic, hands-on learning experiences that enable growth and success; be involved with environmental demonstrations by guest speakers; participate in environmental science field trips; meet peers with similar interests and build new friendships and have fun and create memories to last a lifetime and the Pre-Freshman Engineering Program (a program for middle and high school students geared towards strengthening skills in the sciences, mathematics, computer science, engineering, individual communication, and critical thinking). She is the principal investigator for the Interdisciplinary Urban Environmental Institute funded by National Science Foundation, the Young Scholars Environmental Institute, and the Integration of Technology and Virtual Laboratories into the Biology Curriculum—Impact on Attitude on Learning Biology for Majors and Non-Majors—funded by the Louisiana Board of Regents. Dr. Broadway earned her BS degree from Livingstone College (1976), and her MS degree in molecular biology (1979), and Ph.D. in developmental biochemistry (1983) from Atlanta University. Her research interest lies in the identification and localization of contractile proteins in pre-implanted and implanted rabbit embryos. Dr. Broadway has received honors and recognition from the American Association for Advancement of Science, the Society of Developmental Biology, and the National Society of Black Engineers. She received the First Bearer's Torch Award for Science from the New Orleans chapter of 100 Black Women, the first Presidential All-Star team award, the United States Department of Agriculture Partnership Award, the City of New Orleans Mayor's Certificate of Merit Award, and the Smithsonian Institute Award. She was also the first recipient of the Outstanding Faculty Advisor Award, and the Dillard University Award for Strength, Courage, and Perseverance during Hurricane Katrina and its Aftermath, at the 63rd Joint Meeting of the National Institute of Science/Beta Kappa Chi Meetings, respectively.

Dr. Eric Buckles, Ph.D., Dean of the College of Arts and Sciences, Dillard University

Dr. Eric Buckles is the dean of the College of Arts and Sciences and Professor of Biology at Dillard University. He is also the co-principal investigator and director of a National Science Foundation HBCU-UP grant titled *Improving Minority Participation and Completion through STEM at Dillard University*. He began his career at Dillard University in 2006 and has served as the Program Coordinator of Biology, interim chair of the School of STEM, and faculty senate president. He earned his bachelor's degree in biology from Alcorn State University and a Ph.D. in Biomedical Sciences from Meharry Medical College and served as a postdoctoral research associate in the Department of Microbiology at Virginia Commonwealth University and at the University of Maryland School of Medicine in the Division of Infectious Diseases. His main research interest is aimed at understanding the molecular mechanisms of bacterial pathogenesis with a specific focus on uropathogenic *Escherichia coli*. He has authored and co-authored in several scientific journals including the *Journal of Infectious Diseases*, *Infection and Immunity*, *Microbiology*, and the *Proceedings of the National Academy of Sciences*. Dr. Buckles is a

member of the American Society for Microbiology. He is a Conrad N. Hilton Biology Endowed Professor and an inaugural fellow for the Center for the Advancement of STEM Leadership.

Theodore B. Callier, *Asst. Vice President, Research and Sponsored Programs, Dillard University*

Mr. Callier currently serves as the Assistant Vice President for Research and Sponsored Programs at Dillard University and provides project management and strategic planning for this area of the institution. Mr. Callier has implemented effective models for increasing faculty participation and success in grant writing. Mr. Callier's responsibilities also include seeking avenues to leverage funded activities with other resources to ensure continuation of sponsored projects beyond the initial funding period. Mr. Callier's professional experiences include nearly 30 years in higher education. While at Dillard, Mr. Callier has provided leadership in identifying both federal and state funding, helping to secure and manage millions in grants and other sponsored agreements annually. In addition, Mr. Callier was part of the University's leadership team in 2007 that helped to secure \$160M in resources for campus redevelopment and restoration. In 2011, Mr. Callier served on the leadership team to help secure a \$25M endowment award from the National Institutes of Health. Since 2010, Washington Monthly Magazine has consistently ranked Dillard within the top 10 nationally in research and development expenditures among liberal arts institutions. Mr. Callier has served as principal investigator for and/or helped to secure number of grants for training, community outreach, and economic development. Mr. Callier has also led efforts to plan and implement national and regional conferences involving multiple institutions and agencies. He currently serves as the Chair for the Minority Serving Institutions Research Partnership Collaborative (MSIRPC). Mr. Callier earned both bachelor's and master's degrees from Grambling State University. Additionally, he also completed certification as a Housing Development Finance Professional, granted by the National Development Council.

Dr. Abdalla Darwish, *Physics Professor, Presidential Professor, SPIE fellow, Dillard University*

Dr. Darwish is a Dillard University professor of physics, University Presidential Professor, also is holding the Ruth Simmons University Distinguished Professorship, he is International Society of Optics and Photonic (SPIE) Fellow. He has authored over 120 publications and four book chapters in the areas of nonlinear optical materials, magnetic resonance, waveguides, and thin film fabrication. Through his research efforts, nine patents have been filed, and three were issued in May and July 2019 and July 2021. Dr. Darwish has also been able to form an international research collaboration and MOU with Japan Shibaura Institute of Technology (SIT) in Tokyo. Under his leadership, the physics department became a signature program and holds a National standing in graduating more than 55% of African Americans in physics since 2000 by the American Institute of Physics (AIP) and ranked second in graduating black females in physics. In 2017, Professor Darwish was named the Male Professor of the year by the HBCU Digest. Dr. Darwish has delivered many invited talks and keynote presentations in Japan, China, Italy, Greece, France, and many others. Dr. Darwish has been a Dillard University faculty member since 1998 and has served Dillard University in numerous administrative roles, including chair of the physics, chair of the School of STEM, interim dean of the College of A&S and Associate Provost and Associate Vice President for Academic Affairs. Prior to coming to Dillard, Darwish served as an associate professor at Alabama A&M University, where he supervised many graduate students (MS and PhD). In addition, Dr. Darwish holds a public office where he has been serving as member of city of Kenner civil service board since its inception in 2006 until present. Dr. Darwish was awarded the Monte Lemann Award from the civil service league of the State of Louisiana in October 2014.

Latisha Franklin, *Pennsylvania State University (State College, PA)*

Born and raised in Mobile, Alabama, Latisha received her BS in Biology, minoring in Chemistry, from Dillard University which is a Historically Black College or University. While at Dillard she reinstated the Biology Club, worked to resolve the food desert concern in the Hollygrove community and tutored elementary to middle school-aged scholars. She is a 6th year Ph.D. candidate in the Biochemistry, Microbiology, and Molecular Biology Program at The Pennsylvania State University. Her research, conducted under the mentorship of Dr. Wendy Hanna-Rose, explores changes in metabolism as a result of muscle dysfunction related to metabolic diseases. During her graduate studies, Latisha has presented this work at conferences such as the International *C. elegans* Meeting, The Mid-Atlantic Regional Meeting of the Society for Developmental Biology, and The Penn State Life Sciences Symposium. Latisha is the immediate past president of the Black Graduate Student Association, a Bunton-Waller Scholar, Sloan Scholar, and serves as an At-Large member of the University Park Student Fee Board. She received the 2018 Eberly College of Science Climate and Diversity Award, first-place award winner at 2019 I AM STEM student speaking contest, and 2021 recipient of the Pioneer Award presented by the Penn State Paul Robeson Cultural Center. She previously co-chaired the Graduate Women in Science Annual Voices Networking Conference, now called Empower, and founded of the Minority Graduate Students in STEM lunch series. Latisha shows her passion for service through hosting lab tours for elementary students, leading Diversity, Equity, and Inclusion workshops, and mentoring undergraduate as well as graduate students. Latisha has served on graduate student-focused panels and as the keynote speaker for several events. Latisha has also served on the Graduate School Alumni Society Board and the Eberly Outreach Council as a graduate student representative. In August 2021, she became a certified and registered yoga instructor. Latisha enjoys relaxing in her tent, reading, or recording videos for her YouTube channel called Gratified Grad where it's her "goal to help you graduate with gratification." View her personal website, <https://lifewithlatisha.wordpress.com/>, for more information.

Dr. Trivia Frazier, *Co-Founder, President, and CEO, Obatala Sciences, Inc.*

Dr. Trivia Frazier, a native of New Orleans, is the Co-Founder, President, and CEO of Obatala Sciences, Inc. She is an experienced Adult Stem Cell Researcher and Biotech Business Professional with 15+ years of experience in biomedical sciences and management. She holds bachelor's degrees in Physics (Dillard University '07') and Biomedical Engineering (Tulane SSE '08'), an MBA (Tulane AB '18'), and a PhD in Biomedical Sciences (Tulane SOM '12'). Dr. Frazier completed her postdoctoral work at Pennington Biomedical Research Center and the Tulane Center for Stem Research and Regenerative Medicine. She has trained and collaborated with national and international key opinion leaders and held Academic Chair appointments prior to her leadership role at Obatala. Dr. Frazier has received numerous awards, including gambit's 40 under 40, Dillard University's 40 under 40, the Woman of Distinction award, the UNCF MASKED Award, and she was a finalist for the Ada Lovelace Award for Founders in tech. Dr. Frazier is an Advisory Board member for the New Orleans Task Force, The Beach at the University of New Orleans, and for the Journal Biophysics Reviews. Dr. Frazier is also a wife and mother of three young men. She is dedicated to growing her firm in the City of New Orleans and lifting up the next generation of local talent.

Dr. Kathleen H. Hicks, *Deputy U.S. Secretary of Defense*

Dr. Kathleen H. Hicks serves as the 35th Deputy Secretary of Defense; she was sworn into that office on Feb. 9, 2021. Prior to becoming Deputy Secretary, Dr. Hicks held the position of senior vice president, Henry A. Kissinger Chair, and Director of the International Security Program at the Center for Strategic and International Studies. From 2009 to 2013, she served as a senior civilian official in the Department of Defense. Confirmed by the United States Senate in 2012 as principal deputy undersecretary of defense for policy, she was responsible for advising the secretary of defense on global and regional

defense policy and strategy. She also served as deputy undersecretary of defense for strategy, plans, and forces, leading the development of the 2012 Defense Strategic Guidance and the 2010 Quadrennial Defense Review and crafting guidance for future force capabilities, overseas military posture, and contingency and theater campaign plans. Prior to becoming the DUSD for SPF, from 2006 to 2009 Deputy Secretary Hicks was a senior fellow at the Center for Strategic and International Studies. Deputy Secretary Hicks launched her career as a civil servant in the Office of the Secretary of Defense, serving from 1993 to 2006 in a variety of capacities and rising from Presidential Management Intern to the Senior Executive Service. Dr. Hicks holds a Ph.D. in political science from the Massachusetts Institute of Technology, an M.A. from the University of Maryland's School of Public Affairs, and an A.B. magna cum laude and Phi Beta Kappa from Mount Holyoke College.

Grace Johnson, *Department of Public Health, Louisiana State University Health Science Center*

Grace Johnson is an alumna of the Deeper Student Learning Program at Dillard University. The program was directed by Dr. Ruby Broadway and was taught by professors such as Dr. Saunders, Dr. Dai, and Dr. Agwarambo. After her first year at Dillard, she was inducted into the MARC U* Program, which allowed her to experience numerous research opportunities, conferences, and presentations. She completed her first summer REU in the summer of 2019, at Tarleton State University, in Stephenville, TX. She spent a total of 10 weeks there doing research in soil science, which she presented to a wide-ranging audience. She was mentored by Dr. Bellows. She also worked closely with the director of the Graduate School Summer Prep Program, Mr. Michael Heppler, during the summers of 2020 and 2021. During her time at the summer program, she worked on professional development such as resume building, CV and personal statement construction, writing skills, and graduate school applications. Following graduation at Dillard, she began her journey as a MPH candidate at Louisiana State University Health Sciences Center in New Orleans, LA. At LSUHSC, she studies behavioral and community health sciences. After receiving her MPH, she plans to further her studies in graduate school to obtain a Ph.D. in biological sciences.

Dr. Walter M. Kimbrough, *President, Dillard University*

A native of Atlanta, Dr. Walter M. Kimbrough was his high school salutatorian and student body president in 1985, and went on to earn degrees from the University of Georgia, Miami University in Ohio, and a doctorate in higher education from Georgia State University. He has enjoyed a fulfilling career in student affairs, serving at Emory University, Georgia State University, Old Dominion University, and Albany State University. In October of 2004, at the age of 37, he was named the 12th president of Philander Smith College. In 2012 he became the 7th president of Dillard University in New Orleans, Louisiana. Kimbrough has been recognized for his research and writings on HBCUs and African American men in college. Recently he has emerged as one of the leaders discussing free speech on college campuses. Kimbrough also has been noted for his active use of social media. He was cited by Education Dive as one of 10 college presidents on Twitter who are doing it right (@HipHopPrez), and in 2015 he was named by The Best Schools.org as one of the 20 most interesting college presidents. Dr. Kimbrough has forged a national reputation as an expert on fraternities and sororities, with specific expertise regarding historically Black, Latin and Asian groups. He is the author of the book, *Black Greek 101: The Culture, Customs and Challenges of Black Fraternities and Sororities*, and has served as an expert witness in a number of hazing cases.

Justin Matthews, *School of Engineering, Georgia Tech, Former DSL/Griffiss Institute Alumnus*

Justin Matthews received his Bachelors of Science degree in Physics from Dillard University. During his time at Dillard University, he served as the 15th Mister Dillard University and the president of his very

own organization, New Wealth Society, which is a financial literacy club. Upon his arrival at Dillard University, he was selected as a MC Lyte EducateOurMen Scholar as well as a Tom Joyner Hercules Scholar. He was also presented with the opportunity to work with a non-profit organization called HBCU Heroes. During his time with HBCU Heroes, he was able to take part in voter rights campaign movements, host Instagram lives to educate people about HBCU history and how we can better support them and attend numerous career fests that empower and prepare black college students across the world for the professional world. He is currently a second semester graduate student pursuing his Master's thesis in electrical engineering at the Georgia Institute of Technology. Prior to his time at Georgia Tech, he was admitted into two engineering internship programs; one with the Air Force Research Laboratory in Rome, New York as well as one with the Dillard University Physics Department under Professor Abdalla Darwish. Currently, he works as a graduate research assistant in the Integrated IMEMS (Micro-Electromechanical Systems) team at Georgia Tech. His role in this work is to identify, characterize, and fabricate MEMS devices. This includes silicon wafer design, electrode probing, hardware design, analog circuit design, and COMSOL/Cadence simulation design. He is planning to complete his degree and thesis during the fall semester of 2022 (December of this year). Post-graduation from his program, he plans to either work as a silicon/hardware engineer at a cutting edge tech company or go into work with a technical consulting firm. He ultimately has aspirations of pursuing either a MBA or PhD in engineering management but he would like to go work first and add experience to his resume.

Kelly Nash, Ph.D., *Associate Dean for Faculty Success, College of Sciences and Professor, Department of Physics and Astronomy, University of Texas at San Antonio*

Prof. Kelly Nash is a Professor of Physics in the Department of Physics and Astronomy at the University of Texas at San Antonio (UTSA). She also serves as Associate Dean for Faculty Affairs in the UTSA College of Sciences and the Director for the Kleberg Advanced Microscopy Center at UTSA and previously as the Graduate Advisor of Record. She holds a B.S. in Physics from Dillard University, an M.S. in Applied Physics from the University of Michigan, Ann Arbor, and a Ph.D. in Physics from the University of Texas at San Antonio. Her scientific research focuses on synthesis and characterization nanomaterials and their physical interaction with biological systems from the molecular to the cellular-level. Her research has been supported by the National Science Foundation (NSF), Army Research Office (ARO), the National Institutes of Health (NIH), National Nuclear Security Administration (NNSA), and the Air Force Office of Scientific Research (AFSOR). The impact of her nanomaterials research stretches from fundamental biophysical studies to biomedicine, energy, and environmental applications of materials. She was awarded the Air Force Office of Scientific Research Young Investigator Program award in 2015 for research efforts in biophysics. Additionally, she has numerous awards for her contributions to science and promotion of inclusiveness in STEM including Dillard University Alumni 40-Under-40 award, UTSA COS Excellence in Community Service Award, San Antonio Business Journal 40-Under-40 Award, and UTSA President's Distinguished Diversity Award. She continually advocates for the involvement of underrepresented groups in science through strategic initiatives within UTSA and abroad. She has served as UTSA-American Physical Society (APS) Bridge Program Coordinator, facilitator for APS Professional Skills Development for Women and chair of the APS Conferences for Undergraduate Women in Physics National Organizing Committee.

Olabimpe Olafuyi, Ph.D. *student in Computational Chemistry, Jackson State University*

Ms. Olabimpe Olafuyi is a current Ph.D. student at Jackson State University in Computational Chemistry. She is a member of Alpha Epsilon Lambda honor society for graduate students and Sigma Xi scientific research honor society. Ms. Olafuyi is also a Chemistry Cum Laude graduate with her undergraduate degree from Dillard University in Louisiana. She was a part of the ALPHA KAPPA MU honor society,

National Institute of Science honor society and Beta Kappa Chi Scientific Honor Society. Ms. Olafuyi is currently working on research on Cannabinoid and Epilepsy with the Hill Group at Jackson State University. The research focuses on identifying molecular targets for the CBD treatment of limbic epilepsy. Ms. Olafuyi previously worked on research under Louis-Stokes Louisiana Alliance for Minority Participation Program on Environmental Research under Dr. Lovell Agwaramgbo. My research focus at the time was on remediation of heavy metal contaminated water using various adsorbents. She also participated in research project at University of Texas Medical Branch in Galveston where she looked at health disparities in various regions such as El Paso Texas and saw increases in certain diseases that are more prevalent in one area than another. Ms. Olafuyi also looked at heart diseases and tumors where certain poverty areas had higher level of these diseases compared to others. She has also presented papers at Current Trends in Computational Chemistry conference which she won 1st place as a graduate student, Louisiana State University Undergraduate Research, Dillard Undergraduate Research conference, LAMP Symposium Conference and National Organization of Black Chemists and Chemical Engineers where she won several awards for her research presentation and projects. Outside of academia, Ms. Olafuyi worked in Industry as a lab Technician for Costal Gulf International under contract for Exxon Mobil. She did various tests on Jet fuel, Carbon Black Oil, Diesel Fuel, Naphtha, Distillates, Diesel Blend Stocks, light cycle oil (LCO) and vacuum gas oil.

Yolanda W. Page, Ph.D., *Vice President for Academic Affairs, Dillard University*

Yolanda W. Page is Vice President for Academic Affairs at Dillard University. Under Dr. Page's leadership, the profile of the university's academic programs has increased. Recently, biology (ranked 9th) and film (ranked 13th) were named top programs among Study.com's 2021 Top-Ranked Schools. Intelligent.com's 2021 ranking for small business management degree programs placed Dillard at 29th, and Learn.org ranked Dillard 24th in communications bachelor's degree programs in 2020.

Dr. Page has also overseen several new academic initiatives, including a Center for Racial Justice, a nationally recognized pre-law program, a hybrid RN-to-BSN program, certificate programs in urban water management and food studies and concentrations in medical physics, health science, and supply chain management. The university launched its first online course in 2015, and today approximately 25% of full-time and part-time faculty members are Quality Matters certified and the university's offers an online degree program in Criminal Justice. Recently, the College of Business gained Accreditation Council for Business Schools and Programs (ACBSP) accreditation under her leadership, and the university successfully completed its SACSCOC reaffirmation process. In just eight years under her leadership, the Division of Academic Affairs has secured \$4.9M in external funding, and it has pending grants totaling \$1 million. Dr. Page, who received her Bachelor of Arts degree in English and Business Management from Dillard University and her Master of Arts and Doctor of Philosophy degrees in American and African American Literature from Louisiana State University (LSU), has been recognized with the Council of Independent Colleges (CIC) Chief Academic Officer Award and as one of 25 outstanding women leaders in higher education by *Diverse: Issues In Higher Education*. Dr. Page has presented literary papers, published chapters in books, written several articles about African American literature and published two sourcebooks including *Encyclopedia of African American Women Writers* (named a New York Library Association Best of Reference) and *Icons of African American Literature*.

Heidi Shyu, *Under Secretary of Defense for Research and Engineering, U.S. Department of Defense*

Ms. Heidi Shyu is the Under Secretary of Defense for Research and Engineering (OUSD(R&E)). In this role, she serves as the Chief Technology Officer for the Department of Defense (DoD), mandated with ensuring the technological superiority of the U.S. military, and is responsible for the research, development, and prototyping activities across the DoD enterprise. She also oversees the activities of the Defense Advanced Research Projects Agency (DARPA), the Missile Defense Agency (MDA), the

Defense Innovation Unit (DIU), the Space Development Agency (SDA), the DoD Laboratory and Engineering Center enterprise, and the Under Secretariat staff focused on developing advanced technology and capability for the U.S. military. Previously, she served as the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)), from September 2012 to January 2016. Prior to this, she was Acting ASA(ALT) beginning in June 2011 and appointed the Principal Deputy in November 2010. As the ASA(ALT), she served as the Army Acquisition Executive, the Senior Procurement Executive, the Science Advisor to the Secretary of the Army, and the Army's Senior Research and Development official. She had principal responsibility for all Department of the Army matters related to logistics. Ms. Shyu also led the execution of the Army's acquisition function and the acquisition management system. Her responsibilities included providing oversight for the life cycle management and sustainment of Army weapons systems and equipment from research and development through test and evaluation, acquisition, logistics, fielding, and disposition. Prior to her government service, Ms. Shyu was the Vice President of Technology Strategy for Raytheon Company's Space and Airborne Systems. Ms. Shyu holds a Bachelor of Science Degree in Mathematics from the University of New Brunswick (UNB) in Canada, a Master of Science Degree in Mathematics from the University of Toronto, Master of Science Degree in System Science (Electrical Engineering) from UCLA, and the Engineer Degree from UCLA. She received an Honorary Doctorate of Science from the UNB. She is also a graduate of the UCLA Executive Management Course Program. A member of the Air Force Scientific Advisory Board from 2000 to 2010, she served as the Vice Chairman from 2003 to 2005 and Chairman from 2005 to 2008. Ms. Shyu is a member of the National Academy of Engineering and AIAA Honorary Fellow.