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POLICY AND GLOBAL AFFAIRS DIVISION

Board on Higher Education and Workforce

SPEAKER BIOS (in alphabetical order) VIRTUAL TOWN HALL

Morgan State University: Supporting STEM at MSU and Other HBCUs

Webcast Live Here: <u>https://www.nationalacademies.org/event/03-16-2021/morgan-state-university-town-hall-supporting-stem-at-msu-and-other-hbcus</u>

March 16, 2021 | 2:00-4:30 pm ET

Dr. Oscar Barton, Jr., Ph.D., P.E., Dean, School of Engineering, Morgan State University

Dr. Barton is a Professor and Dean of the Morgan State University Clarence M. Mitchell, Ir. School of Engineering. A native of Washington, D.C., he received his B.S. in Mechanical Engineering from Tuskegee (Institute) University, his M.S. in Mechanical Engineering and Ph.D. in Applied Mechanics from Howard University in 1993. Barton joined Morgan fall 2020, after completing 6 years at George Mason University and a 22-year career at the U.S. Naval Academy. Dr. Barton's research focuses on the development of approximate closed form solutions for linear self-adjoint systems, those that govern the responses of composite structures, and the analysis of dynamic systems. More recently, he investigated the dynamic response of flexible composite structures subject to periodic and random excitation. He has mentored numerous midshipmen through independent research projects and has directed two Trident Scholars, the Naval Academy's flagship research program. He has published over 60 journal and conference articles on these topics. A fellow of ASME, Dr. Barton is actively involved in academic innovations and program assessment. He chairs ASME's Committee on Engineering Education, is member of ASME Public Affairs and Outreach Council, and is a member-at-large on the Engineering Accreditation Commission's Executive Committee of ABET, after having served numerous years as a program evaluator and commissioner. He is a registered engineer licensed to practice engineering in the State of Maryland.

Dr. Lesia L. Crumpton-Young, Ph.D., M.B.A., Provost and Senior Vice President for Academic Affairs, Morgan State University

Over her 28-year career, Dr. Crumpton-Young has held leadership positions at the University of Central Florida, Texas A&M University, Mississippi State University, the National Science Foundation and, most recently, Tennessee State University, where she served as a chief research officer. A rising star in the field of industrial ergonomics in the 1990s, she was the first African American woman to earn an engineering doctorate from Texas A&M University. Along with her teaching responsibilities, she won national recognition for setting up Mississippi State's ergonomic lab oratory in her first two years. She is the recipient of the STEM Innovators award and the US Presidential Award for Excellence in Mentoring in Science and Engineering. Her National Science Foundation-funded research efforts were focused on developing engineering criteria that can be used to design environments that allow people with disabilities to compete in the workplace. She pioneered the use of virtual reality (VR) and computer simulation in ergonomics, the design of displays and controls, workplace design, and the prevention and control of carpal tunnel syndrome. Crumpton-Young also served as an ergonomics consultant for UPS, IBM, and La-Z-Boy Inc., the furniture manufacturer that makes recliners, sofas, stationary chairs, lift chairs and sleeper sofas. In her capacity as Morgan State University's provost and

senior vice president for Academic Affairs, Dr. Crumpton-Young is responsible for the development, administration, growth, and quality of academic programs and university functions supporting student success. She is also a full professor for the Department of Industrial and Systems Engineering in the Clarence M. Mitchell Jr. School of Engineering. Dr. Crumpton-Young earned her bachelor's, master's and doctoral degrees in industrial engineering from Texas A&M University and M.B.A. from Tennessee State University. She is regarded as a transformational leader in higher education.

Mrs. Evelyn Kent, Director, DOD HBCU/MI Program and Outreach, Office Of The Under Secretary Of Defense For Research And Engineering (Research, Technology & Laboratories), Department of Defense

Mrs. Kent serves in several capacities within the Office of the Under Secretary of Defense for Research and Engineering where she provides technical support to the Deputy Director for Research, Technology and Laboratories. She is the Department of Defense (DoD) Program Director for the Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI) Program. In this capacity, she oversees the HBCU/MI Programs, which include Hispanic-Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs), Asian American and Pacific Islanders (AAPIs), and other underrepresented minority communities. These program funds support basic research, equipment and instrumentation upgrades, graduate fellowships, scholarships, research and education centers, and other activities focused on attracting underrepresented minorities to the science, technology, engineering, and mathematics disciplines important to the DoD national security mission. Mrs. Kent represents the DoD on the White House Initiatives Executive Orders for HBCUs and MIs. Her career spans over 40 years of government service in the information technology, weapon systems acquisition, international affairs, environmental life sciences, and the command, control and intelligence environment. Mrs. Kent holds a Bachelor of Science degree in Mathematics from Southern University Baton Rouge and a Master of Science degree in Acquisitions Administration from Central Michigan University. She is also a graduate of the Federal Executive Institute Leadership Program in Charlottesville, VA. Mrs. Kent is the recipient of the Department of Defense Exceptional Civilian Service Award. Mrs. Kent's awards also include the 2012 Women of Color STEM Career Achievement award.

Dr. David K. Wilson, Ed.D., President, Morgan State University

Dr. Wilson is the 10th president of Morgan State University and has a long record of accomplishment with more than 30 years of experience in higher education administration. Dr. Wilson holds four academic degrees: a B.S. in political science and an M.S. in education from Tuskegee University; an Ed.M. in educational planning and administration from Harvard University and an Ed.D. in administration, planning and social policy, also from Harvard. He came to Morgan from the University of Wisconsin, where he was chancellor of both the University of Wisconsin Colleges and the University of Wisconsin-Extension. Before that, he held numerous other administrative posts in academia, including: vice president for University Outreach and associate provost at Auburn University, and associate provost of Rutgers, the State University of New Jersey. Dr. Wilson's tenure as Morgan's president, which began on July 1, 2010, has been characterized by great gains and a momentum of progress for the University. Under his leadership, included among the most recent highlights are: the elevation of Morgan from a moderate research classification of R3 (a ranking it has held since 2006), to an elevated classification of R2, a status reserved for doctoral universities with high research activity; a second-year retention rate of above 70 percent for the past eight consecutive years; and an alumni participation-in-giving rate of 17 percent, a rate higher than most private HBCUs and higher than many public regional universities nationwide. Dr. Wilson's educational philosophy is to put the students' experience first. As a leader, he is a consensus builder and a strong believer in transparency of process. His goal is to make Morgan a leader in producing the next wave of innovators in the U.S.

Dr. Willie E. May, Ph.D., Vice President for Research and Economic Development, Morgan State University Dr. May is VP for Research and Economic Development at Morgan State University where he is working to aggressively increase the quality and quantity research outputs, facilitate increased tech transfer, and better connect research across Maryland's preeminent urban research university to community needs. He previously had a 45-year career at NIST, beginning as a 1-year Term Appointee and climaxing as Under Secretary of Commerce for Standards and Technology and NIST Director. During his career at NIST, he contributed to over 90 peer-reviewed publications and delivered more than 300 invited lectures. Dr. May was VP of the International Committee on Weights and Measures and serves on Advisory Boards for the U.K.'s National Physical Laboratory, China's National Institute for Metrology. and is a member of the US Consumer Reports' Board of Directors. Dr. May received his B.S. Degree from Knoxville College and his Ph.D from the University of Maryland College Park. Notable honors include honorary doctorates from Wake Forest University and the University of Alabama Huntsville; the American Chemical Society's Distinguished Service in the Advancement of Analytical Chemistry and Career Public Service Awards; NOBCChE's Percy Julian and Henry Hill Awards; being recognized in 2015 as "the Federal Government's Top Chemist" by C&E News Magazine and "Laboratory Director of the Year" by the Federal Laboratory Consortium. Dr. May also received the Department of Commerce Bronze, Silver, and Gold Medals as well as the NIST EEO Award on two occasions. He is a Fellow of both the American Chemical Society and the American Association for the Advan cement of Science.

Dr. Michael New, Ph.D., Deputy Associate Administrator for Research, Science Mission Directorate, National Aeronautics and Space Administration

Dr. New is the Deputy Associate Administrator for Research within NASA's Science Mission Directorate. Principal responsibilities encompass: ensuring scientific quality and integrity of research processes, including oversight of SMD scientific competition processes for research awards and flight programs; representing SMD research goals, policies and programs inside and outside NASA; overseeing SMD's relationship with the National Research Council; and managing Directorate -level coordination of suborbital-class flight programs. Previously, Dr. New was the Astrobiology Discipline Scientist and Discovery Program Lead Scientist in the Planetary Science Division in the SMD. In these positions, he led teams and provided expert advice on strategies, technology development, grant and mission selections, and program assignments to the Agency's senior leaders to enable timely and wellinformed decisions related to Planetary Science programs and strategic plans. Before coming to NASA Headquarters, Dr. New performed research in the Exobiology Branch of NASA's Ames Research Center in northern California and served as the Acting Deputy Branch Chief for that organization. Dr. New's research interests are very wide, encompassing the biophysics of basic life processes, the statistical analysis of complex ecological experiments, machine learning, bio-informatics and the application of complexity theory and computer science to the origin of life. Dr. New graduated summa cum laude from Yale University in 1988 with a BS degree in Chemistry. He earned his Ph.D. in Chemical Physics at Columbia University with Dr. Bruce Berne and has performed post-doctoral research at UC Berkeley (with Dr. David Chandler) and UC San Francisco (with Dr. Andrew Pohorille).

Dr. James Olthoff, Ph.D., Associate Director for Laboratory Programs, National Institute of Standards and Technology

Dr. Olthoff currently is performing the non-exclusive functions and duties of the Under Secretary of Commerce for Standards and Technology and Director, National Institute of Standards and Technology. In this role, Dr. Olthoff provides high-level oversight and direction for NIST. Prior to taking on this role, Dr. Olthoff was the Associate Director for Laboratory Programs. He provided direction and operational guidance for all of NIST's scientific and technical laboratory programs, and served as principal deputy to the Under Secretary of Commerce for Standards and Technology and NIST Director. among other duties. He held that position starting in 2018. Previously, Dr. Olthoff served as the Director of Physical Measurement Laboratory (PML) where he was responsible for the maintenance, development, and dissemination of the U.S. national measurement standards system, and oversaw NIST's world-class programs in quantum computing, neuromorphic computing, and quantum measurement standards. He also directed the full suite of NIST calibration services in dimensional, electromagnetic, ionizing radiation, mechanical, optical, thermodynamic, and time and frequency metrology. Dr. Olthoff joined NIST (then the National Bureau of Standards) as a Research Physicist in the Applied Electrical Measurements Groupin 1987. In 2014, he was named Director of the Physical Measurement Laboratory after having served four years as PML's Deputy Director, Prior to his appointment to PML, Dr. Olthoff served as Deputy Laboratory Director of NIST's Electronics and Electrical Engineering Laboratory (2007-2010), Division Chief of the Quantum Electrical Metrology Division (2003-2007), Division Chief of the Electricity Division (2000-2003), and in several supervisory and research positions. Dr. Olthoff received his undergraduate degrees in physics and mathematics from Calvin College in 1980, and his Ph.D. in physics from the University of Maryland in 1985 in atomic, molecular and optical physics. He then held a two-year appointment at the Johns Hopkins School of Medicine before arriving at NIST. During his research career, Dr. Olthoff authored or co-authored more than 120 publications and co-authored or edited four books.

Dr. Fay Cobb Payton, Ph.D., Computer, Information Science and Engineering Program Director, National Science Foundation

Dr. Fay Cobb Payton is a Program Director for Computer and Network Systems in the Computer and Information Science and Engineering (CISE) Directorate at the National Science Foundation. At the NSF, she works with Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science, CISE Minority Serving Institutions Research Expansion Program, INCLUDES, ADVANCE, NSF Research Training Program, Excellence-In-Research for HBCUs, Broadening Participation in Computing Alliances and Computer Science for Undergraduate Education. She is on assignment from North Carolina State University, where she is a Professor of Information Technology/Analytics and named University Faculty Scholar. Her research includes data integrity, AI bias/ethics, healthcareIT and tech innovation at the intersect of race/ethnicity and gender. She holds a B.A. (Accounting) and MBA (Decision Sciences) from Clark Atlanta University and a B.S. (Industrial/Systems Engineering) from Georgia Institute of Technology. Her Ph.D. is in information and decision systems from Case Western Reserve University with a specialty in health care. Prior to her appointment at North Carolina State University, she worked at EY, IBM and Time Inc as a Systems Engineer and consulting.

Dr. Glenda Prime, Ph.D., Dean, School of Education and Urban Studies, Morgan State University

Dr. Prime has had almost two decades of teaching experience in the graduate preparation of science teachers. Prior to this role, Dr. Prime served as a full professor and the chair of the Department of Advanced Studies, Leadership and Policy at MSU. She has been at the university since 1999, and has served in several professorial and administrative positions, such as an associate professor and coordinator of graduate programs in mathematics and science education. She is a science educator and researcher and has published numerous articles in refereed journals in science and technology education and most recently has published a book chapter on technology education. Her work has received international recognition and she has been an invited speaker at several national and international scholarly meetings. Dr. Prime has had extensive leadership experience and currently leads the Ed. D. programs in science and mathematics education at MSU, and was responsible for the

development of the Master's programs in mathematics and science education. Dr. Prime holds the PhD in Education from the University of the West Indies, an M.A. in Education, the Post-Graduate Diploma in Science Education, and the B.S. in Chemistry and Biology.

Dr. Hongtao Yu, Ph.D., Dean, School of Computer, Mathematical and Natural Sciences, Morgan State University

Prior to this role Dr. Yu was a faculty member and chair of the Department of Chemistry and Biochemistry in the College of Science, Engineering and Technology at Jackson State. He has been recognized for his vision and dedication towards recruiting, developing relationships with high schools and other colleges, developing faculty and student mentorship programs, and for assisting students in the pursuit of advanced degrees. Outside of his university responsibilities, he also served as President of the Mississippi Academy of Science. Among Dr. Yu's numerous awards and honors is the 2011 Stanley C. Israel (Southeast) Regional Award for Advancing Diversity in the Chemical Sciences, the HBCU Pioneer Award from the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE), the Mississippi State Legislature HEADWAE Outstanding Faculty Honoree Award, and the National ChemLuminary Award for "Best Activity with Underrepresented Minority Students and/or Organizations" from the American Chemical Society. Dr. Yu received his baccalaureate degree from the Department of Chemistry, University of Science and Technology of China (1982); his master's degree from the Institute of Chemistry, Chinese Academy of Sciences (1986); and, his doctorate (Ph.D.) from the Institute for Organic and Biochemistry, Technical University of Munich, Germany (1990).

NOTES

- For more information on this event: <u>https://www.nationalacademies.org/our-work/closing-the-equity-gap-report-dissemination</u>
- This meeting will be livestreamed and archived for future viewing at the link provided at the top of this document, along with presentation materials.