OPEN SESSION SPEAKER BIOSKETCHES

PANEL 1

Dr. William Regli, Ph.D.
Director, Applied Research Laboratory for Intelligence and Security (ARLIS), University of Maryland

Dr. Regli is a computer scientist who has focused his career on interdisciplinary and use-inspired problems spanning engineering, artificial intelligence and computational modeling and graphics. His most recent activities have deployed cyber-infrastructure systems to capture and curate engineering and science data in order to ensure long-term sustainability. Dr. Regli's current interests include computational tools to exploit the properties of advanced materials, additive manufacturing systems and enabling new paradigms for design and production. He has published more than 250 technical articles and his research has spawned two start-up technology companies (one focused on mobile communications for public safety, the other on information management in edge networks) and resulted in five foundational U.S. Patents in the area of 3D CAD search.

He was the sixth director of the Institute for Systems Research, from 2018-2019. From 2014 to 2017 Regli served on the leadership team of the Defense Advanced Research Projects Agency (DARPA), as Deputy Director (9/2014-12/2016) and then Acting Director (1/2017-7/2017) of the Defense Sciences Office (DSO). During his tenure, DSO initiated programs in areas as diverse as artificial intelligence, design and manufacturing, social science, applied mathematics, physical sciences and advanced sensing technologies. Regli's other government service includes as a Scientific Adviser to the U.S. Department of Energy's (DoE) National Nuclear Security Administration (NNSA) in the areas of information technology and manufacturing (2010-2014) and as a National Research Council Postdoctoral Fellow at the National Institute of Standards and Technology (NIST) (1995-1997). For his contributions, Regli received the DARPA Meritorious Public Service Medal (2018).

Dr. Regli holds a Ph.D. in Computer Science from the University of Maryland at College Park and Bachelor of Science degree in Mathematics from Saint Joseph's University. He is a member of the American Association for the Advancement of Science (AAAS); an elected senior member of the Association of Computing Machinery (ACM) and of the Association for the Advancement of Artificial Intelligence (AAAI); and a Fellow of the Computer Society of the Institute of Electrical and Electronics Engineers (IEEE) for his "contributions to 3D search, design repositories and intelligent manufacturing."

Dr. James J. Hudgens, Ph.D.
Director, Georgia Tech Research Institute (GTRI) and Senior Vice President of the Georgia Institute of Technology (Georgia Tech)

Dr. Hudgens leads over 2,400 employees conducting $642 million in research across a broad range of technological fields that focus on solving critical challenges for government, state, and industry sponsors. Founded in 1934, GTRI is the nonprofit, applied research division of Georgia Tech, with eight laboratories embedded in 22 locations around the country, performing groundbreaking research and engineering advanced prototyping systems. Dr. Hudgens oversees research that spans a variety of disciplines, including autonomous systems, cybersecurity, electromagnetics, electronic warfare, modeling and simulation, sensors, systems engineering, test and evaluation, and threat systems.

Before joining Georgia Tech, Dr. Hudgens was the director of the $265 million-per-year Threat Intelligence Center (TIC) at Sandia National Laboratories, where he led award-winning Information Operations and Proliferation Assessments programs for the National Security Program Division. Dr.

Hudgens initially established the TIC by consolidating two pre-existing centers and programs. His direction increased revenues for Sandia and enabled new capabilities in the cyber and proliferation assessment sectors through partnerships with other national labs, federal agencies, and universities.

Prior to his promotion to director of TIC, Dr. Hudgens directed the Information Systems Analysis Center (ISAC), where he managed cyber research and development (R&D) for the Department of Defense and intelligence community. During his two years in the position, he facilitated the launch of a virtual CyberPARC Integration Center, established a Mission Analytics Group, increased technology development capabilities, and arranged a partnership with a major university for genomic security research.

Dr. Hudgens has led national security research for over 23 years, holds a Ph.D. in Ceramic Engineering and a B.S. in Ceramic Engineering from Iowa State University, and has numerous publications and presentations to his credit. Now focused on Creating the Next wave of advanced technological solutions at one of the nation's leading research institutions, Dr. Hudgens continues to be recognized as a high-level thought leader with a focus on transformation, innovation, and growth.

Dr. Lijun Qian, Ph.D.
Director, Center Of Excellence In Research And Education For Big Military Data Intelligence (Credit), Prairie View A&M University

Dr. Qian is a Professor in the Department of Electrical and Computer Engineering at Prairie View A&M University (PVAMU). He is also the director of the Wireless Communications Lab (WiComLab). Before joining PVAMU, he was a MTS in the Networks and Systems Research Department of Bell-Labs at Murray Hill, NJ. He is a visiting professor at Helsinki University of Technology (now Aalto University), Finland. His research interests are: wireless communications and mobile networks, network security and intrusion detection, and systems biology. His research is supported by National Science Foundation and the Army Research Office.

PANEL 2

Dr. Rodney D. Bennett, Ed.D.
President, The University Of Southern Mississippi

President Bennett serves as the chief executive officer and principal educational officer of The University of Southern Mississippi (USM), a comprehensive public research institution delivering transformative programs to approximately 15,000 students on campuses in South Mississippi and along the Mississippi Gulf Coast.

As proven leaders in innovation, USM's faculty and students have positioned the institution as one of only 131 universities in the nation to earn the Carnegie Classification of Institutions of Higher Education's "R1: Doctoral Universities – Very high research activity" designation. USM's robust research enterprise includes experts in ocean science and engineering, polymer science and engineering, and large event venue safety and security, among others. USM is also one of only 37 institutions in the nation accredited in all four areas of the arts: theatre, art and design, dance and music.

Under President Bennett's leadership, the University has invested in new faculty positions, expanded coastal operations, and worked to increase access to quality education and research programs to serve the needs of the state of Mississippi and beyond. As an economic driver, USM generates an annual economic impact of more than $600 million across the state.

President Bennett's vision is for The University of Southern Mississippi to become the model for public higher education across the country. His key institutional priorities include ensuring student

success; expanding enrollment strategies; enhancing academic instruction; fostering greater focus on research; bolstering economic and community partnerships; and maximizing human potential.

President Bennett holds a Doctor of Education in Educational Administration from Tennessee State University in Nashville and a Specialist in Education, a Master of Education in Educational Administration, and a Bachelor of Science in Mass Communication from Middle Tennessee State University in Murfreesboro.

Dr. Gordon Cannon, Ph.D.
Vice President for Research, The University Of Southern Mississippi

Dr. Cannon is T.W. Bennett Distinguished Professor in the Sciences and Vice President for Research at The University of Southern Mississippi. He joined the Department of Chemistry and Biochemistry at USM in 1987 after spending five years as a postdoctoral fellow at the Roche Institute of Molecular Biology. A biochemist and microbiologist by training, Dr. Cannon's research has focused on carbon metabolism of autotrophic bacteria. His long-standing interest in bacterial micro-compartments, exemplified by the carboxysome which is found in many CO2 fixing microbes, began while he was an undergraduate student at Clemson University. Research into carboxysome structure/function relationships has been the central theme of his professional career for 40 years. He is part of a multinational team of researchers who seek to obtain structural information of the carboxysome using the X-ray free electron laser at the Stanford Linear Accelerator Center.

In his current administrative position as Vice President for Research, Dr. Cannon serves as the university's chief research officer and is responsible for leading and overseeing USM's research enterprise as well as the Trent Lott Center for Excellence in Economic Development and Entrepreneurship. Dr. Cannon is the executive director of the USM Research Foundation and administers operation of the university's technology incubator, The Accelerator.

Dr. Atam P. Dhawan, Ph.D.
Senior Vice Provost for Research and Distinguished Professor of Electrical and Computer Engineering, New Jersey Institute of Technology

Dr. Dhawan is the Senior Vice Provost for Research, Executive Director of Undergraduate Research and Innovation (URI) and Distinguished Professor of Electrical & Computer Engineering at NJIT. He obtained his bachelor's and master's degrees from the Indian Institute of Technology, Roorkee, and Ph.D. from the University of Manitoba, all in Electrical Engineering. From 1985-2000, he held faculty positions in Electrical & Computer Engineering and Radiology departments at University of Houston, University of Cincinnati, University of Texas, University of Texas Medical Center (Dallas). From 2000-2014, he served as the Chair of the Department of Electrical and Computer Engineering, and Associate and Interim Dean of Albert Dorman Honors College.

Dr. Dhawan is an elected Fellow of the National Academy of Inventors (NAI), Fellow of the Institute of Electrical and Electronics Engineering (IEEE), Fellow of the American Institute of Medical and Biological Engineering (AIMBE), and Fellow of the International Federation of Medical and Biological Engineering (IFMBE) for his contributions in medical imaging and image analysis, and healthcare innovations. He has published over 215 research papers and book chapters. He has also authored and co-authored several books in medical imaging, and image analysis.

Dr. Steven L. Ceccio, Ph.D.
Associate Dean of Academic Affairs & former Associate Dean for Research, College of Engineering, University of Michigan, Ann Arbor

Dr. Ceccio serves as the Associate Dean of Academic Affairs of the University of Michigan, Ann Arbor. He is the former Associate Dean for Research for the institution's College Of Engineering. Dr. Ceccio earned a Bachelor of Science degree from the University of Michigan in 1985 and a master of science and doctorate degrees from the California Institute of Technology in 1986 and 1990, respectively, all in mechanical engineering. After serving as a postdoctoral fellow at the California Institute of Technology, he joined the faculty at U-M in the Department of Mechanical Engineering as an assistant professor. He was promoted to associate professor in 1996 and to professor in 2003.

Dr. Roberto Osegueda, Ph.D.
Vice President of Research, University of Texas at El Paso

Dr. Osegueda has served as the Vice President for Research since September 2005, with the primary responsibility of overseeing all research and sponsored project activities at the University. Dr. Osegueda has been a champion in making strides in building human and research capacity and creating an environment of growth for research. UTEP became a Carnegie R1 institution in February 2019. Dr. Osegueda has also been a contributor to UTEP's success creating an enhanced supportive climate for research, creative, and scholarly activities in all of the University's colleges. His office supports more than 350 members of the faculty and staff who seek extramural funding for their research and sponsored project endeavors. In addition, the VP of research has oversight of all University Research Centers. Dr. Osegueda has served the University of Texas at El Paso since September 1987 in various capacities as faculty, researcher and administrator. He was promoted to Full Professor in September 2003. In administrative roles, he has been Assistant and Associate Dean of Engineering, Acting Dean of Engineering, and Director of the FAST Center for Structural Integrity of Aerospace Systems. His research has been funded by numerous agencies, including the Air Force Office of Scientific Research, NASA, Ballistic Missile Defense Organization (now Missile Defense Agency), the John Hopkins University Applied Physics Laboratory, Raytheon, NIST, Air Force Research Labs, the Texas Department of Transportation and other agencies and Industrial partners. He received his higher education at Texas A&M University, graduating with the degrees of Bachelor of Science in Civil Engineering in 1981, Master of Science in Civil Engineering in 1983 and the Ph.D. degree in 1987. He is a registered professional engineer in the State of Texas.

Dr. Ryan Wicker, Ph.D., P.E.
Professor and Director, W.M. Keck Center for 3D Innovation

Dr. Wicker is the endowed Mr. and Mrs. MacIntosh Murchison Chair I professor of mechanical engineering at the University of Texas at El Paso (UTEP), director and founder of the UTEP W.M. Keck Center for 3D Innovation (Keck Center) and America Makes Satellite Center, and Editor-in-Chief and founding editor of Additive Manufacturing, an Elsevier journal. As of January 2021, Ryan has co-founded two university spin-out companies, holds 23 U.S. patents and nine foreign patents, published hundreds of peer-reviewed articles, and has employed more than 400 student researchers in UTEP's Keck Center with many of them becoming leaders in the additive manufacturing industry. The Keck Center represents a world-class facility that focuses on the use and development of additive manufacturing technologies for fabricating 3D objects that are plastic, metal, ceramic, of bio-compatible materials, composite materials, or that contain electronics. Ryan's research, through his outstanding students, is driving a new economy in the El Paso region enabled through additive manufacturing.

PANEL 3

Dr. Phillip L. De Leon, Ph.D.
Associate Vice President for Research and Klipsch, Distinguished Professor of Electrical & Computer Engineering, New Mexico State University

Phillip De Leon serves as Associate Vice President for Research and Chief Science Officer at New Mexico State University. He holds the Klipsch Distinguished Professorship in the Department of Electrical and Computer Engineering and is a faculty fellow at the Sandia National Laboratories. His research is in signal processing and machine learning and has been supported by the Air Force Research Laboratories, Army Research Laboratory, NASA, and Sandia National Laboratories. He earned his Ph.D. in Electrical Engineering from the University of Colorado at Boulder.

Dr. De Leon received the B.S. Electrical Engineering and the B.A. in Mathematics from the University of Texas at Austin, in 1989 and 1990 respectively. He was awarded the AT&T Bell Laboratories Cooperative Research Doctoral Fellowship in 1990 and received the M.S. and Ph.D. degrees in Electrical Engineering from the University of Colorado at Boulder, in 1992 and 1995 respectively. He currently holds the Paul W. and Valerie Klipsch Distinguished Professorship in the Klipsch School of Electrical and Computer Engineering at New Mexico State University and serves as the Associate Vice President for Research and Chief Science Officer.

Dr. De Leon has taught undergraduate and graduate courses in adaptive filtering, advanced linear systems, digital speech processing, DSP, embedded DSP, mobile application development (iOS), pattern recognition and machine learning, quantum computing, and signals and systems. He has supervised the research of over 35 graduate students. His research has been supported by federal agencies (Air Force Research Laboratories, Army Research Laboratory, National Geospatial-Intelligence Agency, NASA), Sandia National Laboratories, and industry. He has published over 80 papers in international journals and conferences and has eight U.S. Patents. His broad work is in Digital Signal Processing (DSP) with specific research interests in machine learning, speech processing, and time-frequency analysis.

Dr. Wayne A. I. Frederick, M.D., MBA, F.A.C.S.
President, Howard University

Dr. Wayne A. I. Frederick was appointed the seventeenth president of Howard University in 2014. He previously served as provost and chief academic officer. Most recently, the Howard University Board of Trustees selected Dr. Frederick to serve as the distinguished Charles R. Drew Professor of Surgery.

Dr. Frederick has advanced Howard University's commitment to student opportunity, academic innovation, public service, and fiscal stability. He has overseen a series of reform efforts, including the expansion of academic offerings, establishing innovative programs to support student success and the modernization of university facilities.

Dr. Frederick received his B.S and M.D. from Howard University. Following his post-doctoral research and surgical oncology fellowships at the University of Texas MD Anderson Cancer Center, Dr. Frederick began his academic career as associate director of the cancer center at the University of Connecticut. Upon his return to Howard University, his academic positions included associate dean in the College of Medicine, division chief in the Department of Surgery, director of the Cancer Center and deputy provost for Health Sciences. He also earned a Master of Business Administration from Howard University's School of Business in 2011.

Dr. Frederick is the author of numerous peer-reviewed articles, book chapters, abstracts, and editorials and is a widely recognized expert on disparities in healthcare and medical education. His medical research focuses on narrowing racial, ethnic and gender disparities in cancer-care outcomes, especially

pertaining to gastrointestinal cancers.

Dr. Frederick was honored with the Distinguished Alumnus Award from the University of Texas MD Anderson Cancer Center. He currently serves on the Board of Directors for the Federal Reserve Bank of Richmond, the U.S. Chamber of Commerce and Humana Inc. He is a member of surgical and medical associations including the American Surgical Association and the American College of Surgeons.

In 2017, he was named "Washingtonian of the Year" by *Washingtonian* magazine and in 2015 was named "Male President of the Year" by *HBCU Digest.*

Dr. Jasbir Dhaliwal, Ph.D.
Executive Vice President for Research & Innovation, University of Memphis

Dr. Dhaliwal serves as Executive Vice President for Research & Innovation at the University of Memphis where he oversees all basic and applied research efforts though the development and implementation of the university's strategic research plan. As Chief Innovation Officer, he also supports the President by leading strategic innovation priorities to help modernize the university's academic and research culture. He also leads an advanced technology research organization - the FedEx Institute of Technology. Dr. Dhaliwal also manages the University of Memphis Research Foundation as Executive Director and is the founding President of its innovation subsidiary, UMRF Ventures Inc.

Prior to this, he served as Vice Provost for Academic Affairs and Dean of the Graduate School with strategic responsibility for the university's portfolio of 132 graduate programs that enroll about 4800 graduate students at the doctoral and master levels. His diverse research leadership experience includes serving as Deputy Director for the Center for Management of Technology at the National University of Singapore and founding the first Canadian university-based technology incubator at what is now the School of Interactive Arts and Technology of Simon Fraser University.

His research focus is on the testing of large, complex, real-time information systems. He has published extensively in this discipline and was awarded the Papasan Family Professorship for Exemplary Leadership for founding the Systems Testing Excellence Program (STEP) which is now the leading international software testing research center making significant contributions both to the science of systems testing and advancing industry best-practices. He has completed projects for the likes of the Joint Interoperability Test Command of the Department of Defense, the Defense Information Systems Agency, the Department of Homeland Security and FedEx.

Dr. Bruce Jones, Ph.D.
Professor and Vice President for Research, Howard University

Dr. Bruce Jones is Vice President for Research and a Professor of Political Science at Howard University. In his role as Vice President for Research, Dr. Jones is responsible for overseeing the University's research infrastructure while spearheading the development of a diverse, robust research portfolio. The Interdisciplinary Research Building serves as the University's comprehensive research home. There, Dr. Jones fosters a collaborative, co-working environment where students and faculty from all disciplines converge for research projects.

Dr. Jones brings more than 25 years of academic and administrative experience in higher education and the nonprofit sector to Howard University. Most recently, he served in a number of roles at the University of Houston, including Vice Provost for Academic Programs and Interim Vice Provost and Dean of the Graduate School. Over the course of his career, Dr. Jones has held two endowed chair professorships; one with the University of Missouri and another with the University of South Florida, where he grew an external grant portfolio from an estimated $625,000 to more than $30 million.

Dr. Jones has extensive experience working with philanthropic institutions across the United States on program funding strategies, strategic planning and evaluation. Prior to joining the academy, Dr. Jones served as the founding Director of the I Have A Dream Foundation and Assistant to the President of the Edward W. Hazen Foundation in New York City. As a strategic planning, evaluation, documentation and assessment consultant he served on grant funded initiatives that were supported by the Ford Foundation, the Lilly Endowment, the Ewing Marion Kauffman Foundation, the Peter Herschend Foundation, the Hall Family Foundation, Civic Progress of St. Louis and the Danforth Foundation. He worked closely with the President and Board of the Quantum Foundation in Palm Beach County to restructure the programmatic emphasis of the foundation. He also worked closely with the President and senior staff at the Gulf Coast Community Foundation of Sarasota County and the Florida Philanthropic Network to compile and complete a comprehensive study on children and hunger in Sarasota County and DeSoto County, Florida. Early in his graduate student career, Dr. Jones had the privilege to serve as a Charles F. Kettering Fellow with the Kettering Foundation in Dayton, Ohio.

Dr. Jones holds a Ph.D. in Political Science, Columbia University, New York City, MPhil. in Political Science, Columbia University, New York City, M.A. in the Politics of Education, Teachers College, Columbia University, New York City and a Bachelor of Science degree from Adelphi University, Garden City, New York.