The Impacts on STEM Student Experiences of Higher Education's response to COVID-19: Resilience and Innovation in Leadership and Decision-Making Tuesday, October 6, 2020

12-3pm ET

Panel #1

Antoine M. Garibaldi, Ph.D. is President of the University of Detroit Mercy. Dr. Garibaldi is in his 20th year as president of two universities and has had a comprehensive career in government and education. Since 2011, he has been the 25th and first African American and lay president of University of Detroit Mercy, founded in 1877 by the Jesuits as University of Detroit and consolidated in 1990 with Mercy College of Detroit. He was also the sixth and first African American president of Gannon University (PA); first Provost and Chief Academic Officer of Howard University; and he served successively at Xavier University of Louisiana as Professor and Chairman of Education, Dean of the College of Arts and Sciences, and Vice President for Academic Affairs. At Xavier, Howard, Gannon and Detroit Mercy, he has served as principal investigator and/or received STEM grants from the National Science Foundation and National Institutes of Health. In 2014, University of Detroit Mercy received one of the initial NIH "Building Infrastructure Leading to Diversity (BUILD)" awards to increase the number of diverse students enrolling in the biomedical sciences. A tenured Professor of Education and nationally noted scholar, Dr. Garibaldi is the author of eleven books, more than 90 research articles and chapters, and a Fellow of both the American Educational Research Association and the American Psychological Association. Dr. Garibaldi received his B.A. from Howard University and his Ph.D. in Educational Psychology from the University of Minnesota.

Paul M. Goldbart is Professor of Physics at The University of Texas at Austin, where he serves as Dean of the College of Natural Sciences. He received his education at Cambridge University, UCLA and Imperial College London. His research is primarily on the physics of condensed matter. This field explores how the large-scale features of matter emerge as consequences of the nature of its constituents and the interactions between them. Goldbart has also contributed to the fields of mesoscopic physics, quantum entanglement and chaos, atom-light crystallization in ultracold gases, nano-superconductivity, and a little law and economics. He interacts widely, with both experimentalists and theorists, and has co-authored some 150 journal articles and a textbook: *Mathematics for Physics – A Guided Tour for Graduate Students*. Passionate about education, Goldbart has taught at all collegiate levels and guided numerous doctoral and postdoctoral researchers, many of whom have gone on to university faculty positions. He is an advocate for public engagement in science and mathematics, and has served as honorary chair of the Atlanta Science Festival. Goldbart has been elected to fellowships in the American Physical Society, the U.K.'s Institute of Physics, and the American Association for the Advancement of Science, and he was named a National Science Foundation Presidential Young Investigator.

Dr. Kim LaScola Needy is a Professor of Industrial Engineering and serves as Dean of the Graduate School and International Education at the University of Arkansas. She has co-authored over 150 papers, is a co-author of *Fundamentals of Engineering Economic Analysis,*

Second Edition by John Wiley & Sons published in 2020, and has been funded on 38 different research grants. Dean Needy received the 2019 Albert G. Holzman Distinguished Educator Award from the Institute of Industrial & Systems Engineers recognizing educators who contributed significantly to the profession through teaching, research and publication, extension, innovation, or administration. She is a Fellow and Past President of both the Institute of Industrial & Systems Engineers and the American Society for Engineering Management, and a Fellow of the American Society for Engineering Education. She serves as the Past President of the Conference of Southern Graduate Schools (CSGS), and is an Affiliate Liaison Representative for CSGS serving on the Council of Graduate Schools Board.

Lynn Andrea Stein is professor of computer and cognitive science at the Olin College of Engineering. From 1990 to 2000, Dr. Stein was an assistant and then associate professor in the Electrical Engineering and Computer Science Department at MIT and at the Artificial Intelligence Laboratory and Laboratory for Computer Science there. Dr. Stein's research spans the fields of artificial intelligence, programming languages, and engineering and computer science education. She is a co-author of the foundational documents of the semantic web and the "mother" of a humanoid robot and an intelligent room. She is a frequent speaker at educational conferences on work including pioneering curricular applications of inexpensive robotics and a curriculum for introductory computer science. Dr. Stein has received the National Science Foundation Young Investigator Award, a Bunting Fellowship, and several educational awards; she has also served on the Executive Council of the Association for Advancement of Artificial Intelligence, on the Member Services Board of the Association for Computing Machinery and in various leadership positions as a woman in computing. Over the past two and a half decades, Dr. Stein has worked with the worldwide community to develop broader visions of computing and engineering education, running educational workshops, leading professional initiatives, and serving on advisory and visiting committees to a wide range of academic institutions and curricular programs. As a member of Olin College's founding faculty, Dr. Stein played a leadership role in many aspects of the development of the college. In 2009, Dr. Stein was named the founding director of Olin's Initiative for Innovation in Engineering Education. Dr. Stein has a bachelor's degree, cum laude, in computer science from Harvard and Radcliffe Colleges and master's and doctorate degrees in computer science from **Brown University**

Panel #2

Dr. Camille A. McKayle is Provost and Vice President of Academic Affairs at the University of the Virgin Islands (UVI). Previous to this, she served as Dean of the College of Science and Mathematics. She has successfully served as PI or co-PI on a variety of grant projects from National Science Foundation, NASA, Department of Defense, and the Mathematical Association of America. She currently serves as PI for three National Science Foundation projects: The Center for the Advancement of STEM Leadership (CASL; collaborative with North Carolina A&T State University, Fielding Graduate University, Association of American Colleges and University and UVI as lead), UVI's HBCU-Undergraduate Program grant, and Florida-Caribbean Louis

Stokes Alliance for Minority Participation Regional Center of Excellence (collaborative with Santa Fe College). Together, these programs aim to broaden participation in the Nation's STEM (Science, Technology, Engineering and Mathematics) enterprise through focus on undergraduate STEM education. From 2005 - 2008, Dr. McKayle was Program Officer at the National Science Foundation for the Historically Black Colleges and Universities Undergraduate Program, in the Division for Human Resource Development in the Directorate for Education and Human Resources. Dr. McKayle received her Ph.D. in Mathematics, from Lehigh University (Pennsylvania). Her undergraduate degree in Mathematics is from Bates College (Maine). She recently completed a Master's Certificate in Creativity and Change Leadership from Buffalo State College's International Center for Creativity Studies. She Her current research interests are in the areas of Creativity Studies, Creativity and Leadership, STEM Education and STEM Leadership.

Dr. Suzanne Ortega became the sixth President of the Council of Graduate Schools on July 1, 2014. Prior to assuming her current position, she served as the University of North Carolina Senior Vice President for Academic Affairs (2011-14). Previous appointments included the Executive Vice President and Provost at the University of New Mexico, Vice Provost and Graduate Dean at the University of Washington, and the University of Missouri. Dr. Ortega's masters and doctoral degrees in sociology were completed at Vanderbilt University. With primary research interests in mental health epidemiology, health services, and race and ethnic relations, Dr. Ortega is the author or co-author of numerous journal articles, book chapters, and an introductory sociology text, now in its 8th edition. An award-winning teacher, Dr. Ortega has also served on a number of review panels for NSF and NIH and has been the principal investigator or co-investigator on grants totaling more than \$6 million in state and federal funds. Dr. Ortega serves or has served on a number of professional association boards, committees, including, the Executive Boards of the Council of Graduate Schools, the Graduate Record Exam (GRE), the National Academies of Science Committee on the Assessment of the Research Doctorate, the National Science Foundation's Human Resources Expert Panel, the North Carolina E-learning Commission, the North Carolina Public School Forum, the UNC TV Foundation, and the UNC Press Board of Governors.

Natalia Villanueva Rosales, Ph.D. is Professor in Computer Science at The University of Texas at El Paso (UTEP). Her work aims to improve the efficiency and effectiveness of the discovery, integration, and trust of scientific data and models. Her approaches links human and machine knowledge to address societally-relevant problems in areas that require interdisciplinary research and international collaborations such as sustainability of water resources and Smart Cities. She is active in efforts to encourage and support women and Hispanics pursuing a career or education in Science and Engineering. She leads the <u>iLink Research Group</u> at the NSF-Funded <u>Cyber-ShARE Center of Excellence</u> at UTEP and her work has contributed to the harnessing of data for converting cities to Smart Cities and how to seamlessly manage data using expressive ontologies across disciplines, institutions and countries for the generation of scientific models and metrics to answer complex (scientific) questions in the areas of Freight Performance, Smart Cities solutions, Biodiversity Models Biodiversity and hydro economical models. She earned a Ph.D. in Computer Science from Carleton University (Canada), a M.Sc. in

Artificial Intelligence from the University of Edinburgh (UK), and a bachelors degree in Computer Science from the Universidad Panamericana Campus Aguascalientes and a doublemajor in Statistics from the Center for Mathematics Research (Mexico).

Rachel A. Smith, Ph.D. is an assistant professor in Higher Education and Student Affairs in the School of Education at Iowa State University. Her research relies on social network analysis and mixed methods to examine the roles higher educational institutions play in organizing student relational patterns and their associations with educational outcomes. Her research program includes work on curricular and residential learning communities, undergraduate community formation, and higher education knowledge networks. Smith is co-PI on an NSF RAPID grant to investigate graduate students' experiences of support and stress during the COVID-19 pandemic. She teaches courses on student affairs, U.S. college students, and assessment. Smith was previously a faculty member at Baruch College – City University of New York in the Marxe School of Public and International Affairs. She earned a Ph.D. and M.S. in Higher Postsecondary Education from Syracuse University and holds a B.A. in history from the University of Wisconsin-Madison.

Panel #3

Dawn Alston is chief financial officer and vice president for business and financial affairs at Spelman College. She presides over the Division of Business and Financial Affairs and oversees Facilities Management and Services, the Office of Human Resources and the Office of the Controller as well as being involved in oversight of Public Safety and Dining Services with the Division of Student Affairs. A native of Washington, D.C., Alston joined Spelman in 1999 as a research technician in the Department of Biology and Biochemistry. During her 17-year tenure in the Division of Business and Financial Affairs, she was responsible for the budgetary oversight of Administrative Support and auxiliary services. Before coming to Spelman, Alston served as a compliance officer at the Department of Defense and was an adjunct biology instructor at Wofford College and Tri-County Technical College.

Dr. Andrew T. Hsu is the President of the College of Charleston, formally taking office on May 16, 2019. In his first year as President, Hsu oversaw the addition of two new engineering programs (systems and electrical engineering), a record-breaking year of philanthropic engagement, the celebration of the 250th anniversary of the College's founding in 1770 and the creation of a 10-year strategic plan, *Tradition and Transformation*. Hsu earned his Ph.D. in aerospace engineering from Georgia Institute of Technology, after which he worked in in industry for 11 years with Sverdrup/NASA and Rolls-Royce. Before joining the College, Andrew Hsu was the provost and executive vice president for academic affairs at the University of Toledo, a public research university in Ohio. Before becoming provost and executive vice president at Toledo, Hsu served as the dean of engineering at San Jose State University and as the associate vice president for research and the dean of the Graduate School at Wright State University. Throughout his career, Hsu has remained actively engaged in the community. He currently serves on the Tri-County Cradle to Career Collaborative Board of Directors, the

Charleston Regional Development Alliance Leadership Council and the S.C. Commission for Minority Affairs – Asian American and Pacific Islander Advisory Committee. Previously, he was a member of the Board of Governors for Rocket Innovation, the Leadership Council of CalCharge, the Board of Governors of Edison Materials Technology Center in Dayton, the Board of Governors of the University Clean Energy Alliance of Ohio, and was appointed by Governor Mitch Daniels as chair of the Indiana Bioproduct Commission.

Alex Johnson, Ph.D. is President of Cuyahoga Community College where he focuses on strengthening the college's 50-year mission of providing high-quality, accessible and affordable educational opportunities and services. Since becoming president in July 2013, he has instituted programs to strengthen access, equity, success and completion for the nearly 51,000 credit and non-credit students each year who attend Tri-C locations. His recent book, *Change the Lapel Pin. Personalizing Leadership to Transform Organizations and Communities*, based on more than 25 years of experience as a college president, provides insights on how leaders at all levels can improve their chances for success. Nationally, he is the Past Chair of the American Association of Community Colleges (AACC) Board and serves on boards of the Association of American Colleges and Universities (AAC&U), Achieving the Dream (ATD), League for Innovation in the Community College, and the President's Advisory Committee of Phi Theta Kappa.

Julie R. Posselt is an associate professor of higher education at the University of Southern California at the Rossier School of Education. Her research examines institutionalized inequalities in higher education and methods to reduce inequities and encourage diversity. She has written three books focusing on equity and inclusion in higher education, as well as numerous articles and papers on the subject. She completed the National Academy of Education's first national study of graduate student mental health, and directs the National Science Foundation- funded California Consortium for Inclusive Doctoral Education and the Inclusive Graduate Education Research Hub. She is associate editor of the Journal of Higher Education. She earned her Ph.D. in higher education from the University of Michigan. She has not previously served on an Academies' committee.