Addressing the Underrepresentation of Women of Color in Tech

Committee

Evelynn M. Hammonds

Co-Chair

Evelynn M. Hammonds is the Barbara Gutmann Rosenkrantz Professor of the History of Science and Professor of African and African American Studies at Harvard University. She holds a BS in physics from Spelman College, a BEE in electrical engineering from Georgia Tech, SM in Physics from MIT and a PhD in the history of science from Harvard University. Hammonds was the first Senior Vice Provost for Faculty Development and Diversity at Harvard University (2005-2008). From 2008-2013 she served as Dean of Harvard College. Her areas of research include the histories of science, medicine and public health in the United States; race and gender in science studies; feminist theory and African American history. Hammonds work focuses on the intersection of genetic, medical and socio-political concepts of race in the United States. She is currently the director of the Project on the Study of Race & Gender in Science & Medicine at the Hutchins Center for African and African American Research at Harvard University. Prof. Hammonds is an Area Advisor for African American History, History of Science and Technology for the Online Bibliography of Oxford University Press.

Valerie Taylor

Co-Chair

Valerie Taylor is the Director of the Mathematics and Computer Science Division. She received her Ph.D. in electrical engineering and computer science from the University of California, Berkeley, in 1991. She then joined the faculty in the Electrical Engineering and Computer Science Department at Northwestern University, where she was a member of the faculty for 11 years. In 2003, she joined Texas A&M, where she served as head of the computer science and engineering department and senior associate dean of academic affairs in the College of Engineering and a Regents Professor and the Royce E. Wisenbaker Professor in the Department of Computer Science. Her research is in the area of performance analysis and modeling of parallel, scientific applications. Currently, she is focused on the areas of performance analysis, power analysis and resiliency. I Dr. Taylor is the Executive Director of the Center for Minorities and People with Disabilities in IT (CMD-IT). The organization seeks to develop the participation of minorities and people with disabilities in the IT workforce in the United States.

Gilda A. Barabino

Member

Gilda A. Barabino is President of Olin College of Engineering. She previously served as Daniel and Frances Berg Professor and Dean at The City College of New York's (CCNY) Grove School of Engineering. Prior to joining CCNY, she was Associate Chair for Graduate Studies and Professor in the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory. At Georgia Tech she also served as the inaugural Vice Provost for Academic Diversity. Prior to Georgia Tech and Emory, she rose to the rank of Professor of Chemical Engineering and was Vice Provost for Undergraduate Education at Northeastern University. She is a noted investigator in the areas of sickle cell disease, cellular and tissue engineering, and the role of race/ethnicity and gender in science and engineering.

Dr. Barabino is a member of the National Academy of Engineering and the National Academy of Medicine, a fellow of the American Association for the Advancement of Science (AAAS), the American Institute of Chemical Engineers (AIChE), the American Institute for Medical and Biological Engineering (AIMBE) and the Biomedical Engineering Society (BMES). Dr. Barabino serves on the Scientific Advisory Board of the Chan Zuckerberg Biohub. She is Past-President of BMES and Past-President of AIMBE. She has received an honorary degree from Xavier University of Louisiana, the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring, AIChE's Award for Service to Society, and AIMBE's Pierre Galetti Award. Dr. Barabino is a member of the National Science Foundation's (NSF) Advisory Committee for Engineering, the congressionally mandated Committee on Equal Opportunities in Science and Engineering, the AAAS Committee on Science, Engineering and Public Policy, and the incoming chair of the National Academies Committee on Women in Science, Engineering, and Medicine. She consults nationally and internationally on STEM education and research, diversity in higher education, policy, faculty and workforce development.
She received a B.S. from Xavier University of Louisiana and a Ph.D. from Rice University.

Sarita E. Brown

Member

Sarita Brown is the co-founder and President of Excelencia in Education. For more than 30 years, she has worked at prominent educational institutions and at the highest levels of government to implement effective strategies to raise academic achievement and increase opportunity for low-income and students of color. She started her career at The University of Texas at Austin by building a national model promoting minority success in graduate education. Coming to the nation's capital to work for educational associations, Brown was tapped to serve as Executive Director of the White House Initiative for Educational Excellence for Hispanic Americans under President Bill Clinton and U.S. Secretary of Education Richard Riley. She later applied her talents and experience to the not-for-profit sector.

Jamika D. Burge

Member

Jamika D. Burge is a Senior Manager at Capital One, where she oversees research curriculum development and internal/external outreach. At Capital One, she ideates and creates innovative user research curricula that empower designers, developers, and engineers to apply design thinking and human-centered design principles into their daily work, and beyond. She also engages with internal and external organizations in computing and design outreach activities. Prior to joining Capital One, Jamika served non-profit and government organizations, including as a consultant to the Defense Advanced Research Projects Agency (DARPA) in the Information Innovation Office (I2O). She provided technical and management consult for innovative DARPA programs which were funded at over $70 million. Her research interests lie in human-computer interaction (HCI), specifically in the design of technologies that support a range of communication and interaction needs. She is active in computer science education and STEM preparedness efforts, providing expertise for a host of funded programs funded by the National Science Foundation (NSF) and the Computing Research Association (CRA), particularly those seeking to broaden participation in computer science. She also provides insight and research into the layers of intersectionality that affect black women and girls in computer science. Jamika holds a Ph.D. in computer science, with a focus on human-computer interaction (HCI) from Virginia Polytechnic Institute and State University, where she was an IBM Research Fellow.

Dr. Burge is also Founder and Principal of Design & Technology Concepts (DTC), LLC, where she focuses on computer science design and education research. To date, DTC has consulted for Google, the National Center for Women in Information Technology (NCWIT), and the American Association of College & Universities (AAC&U), among other organizations. Her career has also included positions across academic (Spelman College and Howard University), non-profit (Smarter Balanced at UCLA), and industry (IBM Research) sectors.

Frances A. Colon

Member

Frances Colón is the former Deputy Science and Technology Adviser to the Secretary of State at the U.S. State Department. As a science diplomat in Washington D.C. from 2012 - 2017, Colón led the re-engagement of scientific collaboration with Cuban scientists and coordinated climate change policy for the Energy and Climate Partnership of the Americas announced by President Obama. She earned her PhD in Neuroscience in 2004 from Brandeis University and her B.S. in Biology in 1997 from the University of Puerto Rico. She currently specializes in advising local and national-level governments on science policy and evidence-based decision-making. Colón is a 2018 - 2019 New Voices Fellow of the National Academies of Science, Engineering and Medicine and a 2019 Open Society Foundations Leadership in Government Fellow. Her South Florida Climate Justice Project leverages her citizen appointment on the City of Miami Sea Level Rise Committee to create awareness and catalyze policy action that will counter the impacts of climate change and gentrification on vulnerable communities of South Florida.

Sarah Echohawk

Member

Sarah EchoHawk, an enrolled member of the Pawnee Nation of Oklahoma, has been working on behalf of Native people for over 20 years. She has been the Chief Executive Officer (CEO) of the American Indian Science and Engineering Society (AISES) since 2013. A national American Indian nonprofit organization founded in 1977, AISES' mission is to substantially increase the representation of American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, First Nations and other indigenous peoples of North America in science, technology, engineering, and math (STEM) studies and careers. In 2017, Ms. EchoHawk was appointed the President of AISES Publishing, Inc. (API). In her role as President of API, she is responsible for the day-to-day management of the corporation including the management and oversight of its flagship product, Winds of Change (WOC) magazine.

Elena Fuentes-Afflick

Member

Elena Fuentes-Afflick is Professor and Vice Chair of Pediatrics, Chief of Pediatrics at the Zuckerberg San Francisco General Hospital, and Vice Dean for Academic Affairs in the School of Medicine, University of California San Francisco. Dr. Fuentes-Afflick's research focuses on health disparities in perinatal and pediatric health outcomes. The majority of her research has focused on the surprisingly favorable perinatal outcomes among immigrant Latina women, an "epidemiologic paradox." She has also investigated the role of acculturation and immigration status on access to care and perinatal outcomes and the effect of acculturation on body mass outcomes in Latinos. Recent areas of investigation include professionalism, faculty misconduct, and academic affairs. Since 2012, Dr. Fuentes-Afflick has been responsible for overseeing all academic affairs in the School of Medicine, including the recruitment, development and advancement of a diversified academic workforce. She is also responsible for overseeing innovative programs for faculty orientation, career development, and leadership training. Dr. Fuentes-Afflick was elected to the National Academy of Medicine in 2010, and has had extensive committee service on several NRC committees continuously since 2011 as well as service on the Board on Children, Youth, and Families. She received her medical degree from the University of Michigan, her master's in public health from the University of California, Berkeley, and her bachelor's degree in biomedical science from the University of Michigan.

Ann Q. Gates

Member

Ann Q. Gates is Professor and Chair of the Computer Science Department at the University of Texas at El Paso. Her areas of research are in software engineering and cyberinfrastructure with an emphasis on workflows, ontologies, and formal software specification. Gates directs the NSF-funded Cyber-ShARE Center that focuses on developing and sharing resources through cyber-infrastructure to advance research and education in science. She was a founding member of the NSF Advisory Committee for Cyber-infrastructure. Gates served on the IEEE-Computer Society (IEEE-CS) Board of Governors 2004-2009. In addition, she chairs the IEEE-CS Educational Activity Board's Committee of Diversity and External Activities and has established a model for specialized student chapters focused on leadership, entrepreneurship, and professional development. She is a member of the Computer Science Accreditation Board (2011-2013). Gates leads the Computing Alliance for Hispanic-Serving Institutions (CAHSI) and is a founding member of the National Center for Women in Information Technology (NCWIT).

Shawndra Hill

Member

Shawndra Hill is a Senior Researcher in the Computational Social Science Group at Microsoft Research NYC. Prior to joining Microsoft, she was on the faculty of the Operations and Information Management Department at the Wharton School of the University of Pennsylvania, where she was an Annenberg Public Policy Center Distinguished Research Fellow, a Wharton Customer Analytics Initiative Senior Fellow, and a core member of the Penn Social Media and Health Innovation Lab and the Warren Center for Network and Data Sciences. Generally, she studies data mining, machine learning and statistical relational learning and their alignment with business problems. Specifically, Hill researches the value to companies of mining data on how consumers interact with each other on online platforms — for targeted marketing, advertising, health and fraud detection purposes. Her current research focuses on the interactions between TV content and online behaviors (www.thesocialtvlab.com). Her past and present industry partners include AT&T Labs Research, ClearForest, and Siemens Energy & Automation.

Maria Ong

Member

Maria (Mia) Ong is a Senior Research Scientist and Evaluator at TERC, a STEM education research organization in Cambridge, Massachusetts. She is also the Founder and Director of Project SEED (Science and Engineering Equity and Diversity), a social justice collaborative affiliated with The Civil Rights Project/Proyecto Derechos Civiles at UCLA. For nearly twenty years, she has conducted empirical research focusing on women of color in higher education and careers in STEM and has led evaluation of several STEM diversity/inclusion programs. Ong’s work has appeared in reports to U.S. Congress and to the U.S. Supreme Court and in journals such as Social Problems and Harvard Educational Review, and she was an invited speaker at the 2016 White House meeting on inclusive education in STEM. Between 1996 and 2000, she directed an undergraduate physics program for minorities and women at U.C. Berkeley; for this work, she was a co-recipient of a U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring.

Manuel Perez-Quinones

Member

Manuel A. Pérez Quiñones is Professor of Software and Information Systems at the University of North Carolina at Charlotte. His research interests include personal information management and diversity issues in computing. He holds a D.Sc. from The George Washington University and a BA & MS from Ball State University. Before joining UNCC, he worked at Virginia Tech, University of Puerto Rico-Mayaguez, Visiting Professor at the US Naval Academy, and as a Computer Scientist at the Naval Research Lab. He is an NSF Career awardee, a Senior Member of the ACM, and has been recognized with the Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science and Diversifying Computing, and the CRA Nico A. Haberman award. He is originally from San Juan, Puerto Rico.

Karl W. Reid

Member

Dr. Karl W. Reid was appointed Senior Vice Provost and Chief Inclusion Officer at Northeastern University on April 1, 2021. He also holds the title of Professor of Practice in the Graduate School of Education in the College of Professional Studies. Prior to joining Northeastern, Dr. Reid served for seven years as the Executive Director of the National Society of Black Engineers (NSBE), marking his return to the organization that gave him his first major leadership experience 32 years earlier. A certified diversity professional, Dr. Reid has been a leading national advocate for diversity and inclusion, and increasing college access, opportunity and success for low-income and minority youth. Prior to his work at NSBE, Dr. Reid was at the United Negro College Fund (UNCF), where he oversaw new program development, research and capacity building for the organization’s 37 historically black colleges and universities and held the title of Senior Vice President for Research, Innovation and Member College Engagement. Before his service at UNCF, he worked in positions of progressive responsibility to increase diversity at his alma mater, the Massachusetts Institute of Technology (MIT), which he left as Associate Dean of Undergraduate Education and Director of the Office of Minority Education. While working at MIT as Director of Engineering Outreach Programs, Dr. Reid earned his Doctor of Education degree at Harvard University. His dissertation explored the interrelationship of race, identity and academic achievement for African American males in college. He is the author of “Working Smarter, Not Just Harder: Three Sensible Strategies for Succeeding in College...and Life.” Dr. Reid is also a founding member of the 50K Coalition, a national effort to produce 50,000 diverse engineering graduates annually by 2025. Dr. Reid earned his undergraduate and master’s degrees in Materials Science and Engineering and was a Tau Beta Pi Scholar.

Allison Scott

Member

Allison Scott, PhD is the Chief Research Officer at the Kapor Center, leading a research team aiming to enhance diversity in the tech ecosystem through: (a) conducting landscape studies and research on interventions within educational settings and the technology workplace, and (b) disseminating effective research-based strategies, resources, and practices across the tech ecosystem. Prior to leading research at KCSI, Dr. Scott was the Program Leader for the NIH's Enhancing the Diversity of the NIH-funded Workforce Program, a set of three experimental initiatives implementing and examining the effectiveness of training, mentoring, and institutional development interventions to enhance diversity in biomedical research. Dr. Scott was previously the Director of Research and Evaluation at the Level Playing Field Institute (LPFI), overseeing a research agenda examining barriers to the pursuit and completion of degrees and employment in Science, Technology, Engineering, and Mathematics (STEM) among underrepresented populations. Her research examined the influence of perceived barriers and stereotypes in the sciences, the double-bind facing women of color, and the effectiveness of research-based interventions in improving STEM outcomes for underrepresented groups. In addition, Dr. Scott led the longitudinal evaluation of LPFI's pre-college STEM intervention programs and is Principal Investigator for an NSF CE21 grant to increase access, success, and preparation in computer science for underrepresented students in California. In just 2 years, this project has demonstrated significant increases in the numbers of underrepresented students of color and girls completing computer science courses, taking the AP CS exam, and intending to major in CS in college.

Kimberly A. Scott

Member

Kimberly A. Scott is a professor of women and gender studies in the School of Social Transformation at Arizona State University (ASU) and the founding executive director of ASU's Center for Gender Equity in Science and Technology (CGEST). Founded by Professor Scott, the center is a one-of-a-kind research unit focused on exploring, identifying, and creating innovative scholarship about underrepresented women and girls in science, technology, engineering and mathematics (STEM). Center projects include the National Science Foundation (NSF)-funded COMPUGIRLS; U.S. Department of Education-funded COMPUPOWER; Gates-funded project on African American Families and Technology Use; and NSF-funded Culturally Responsive Co-Robotics Program. Scott is a member of the NSF STEM Education Advisory Panel. The panel was created to encourage U.S. scientific and technological innovations in education and assembled in consultation with the U.S. Department of Education, the National Aeronautics and Space Administration (NASA), and the National Oceanic and Atmospheric Administration (NOAA). Scott is also an affiliate faculty in George Mason University's Center for Digital Media Innovation and Diversity located in Fairfax, Virginia. Trained as a sociologist of education and childhoods, Scott's interdisciplinary work examines girls' of color (African American, Native American, Latina) social and academic development in informal spaces and their technosocial innovations. With nearly 50 publications in outlets such as the, International Journal of Qualitative Studies in Education, International Journal of Gender, Science, and Technology, Feminism and Psychology, Huffington Post, and Slate, to name a few.

Cynthia Winston-Proctor

Member

Cynthia Winston-Proctor is a narrative personality psychologist. She is also Professor of Psychology at Howard University, Principal of Winston Synergy, L.L.C., and Co-Principal Investigator of the NSF HU ADVANCE-Institutional Transformation Initiative. Her academic and practice work focus on the psychology of success of women within academic and corporate environments. Winston-Proctor also translates research to develop culturally relevant psychological science, research design & analysis, computational thinking, and behavioral cybersecurity education models for middle school, high school, and undergraduate learning environments. She is on the Editorial Board of the American Psychological Association journal, Qualitative Psychology, President of the Society of STEM Women of Color, and Vice Chair of the Board of Howard University Middle School of Mathematics and Science. She received the NSF CAREER Award for her early career work on the psychology of success and the meaning of race within the lives of African American scientists and engineers.