

2022 SHOWCASE

*Building a Community of Practice to Advance
Innovation Capacity and Sustainability at HBCUs*



Dear 2022 HBCU Making and Innovation Showcase Participants:

Welcome to the 2022 HBCU Making and Innovation Showcase hosted by The American Association for the Advancement of Science (AAAS) Inclusive STEM Ecosystems for Equity and Diversity (ISEED) Unit and supported by the National Science Foundation (NSF) HBCU-Universities Program (UP) in the Division of Human Resources Development (HRD) in the Directorate for Education and Human Resources (EHR). Since 2018, we have convened five HBCU Making and Innovation Showcases and supported 241 HBCU students and 83 faculty from 32 HBCUs to develop and pitch their prototypes that have addressed 12 of the 17 UN Sustainable Development Goals (SDGs). Additionally, teams have participated in 82 professional development and mentoring sessions in the areas of making, innovation, invention and entrepreneurship.

We are excited to have remarks at our opening plenary by James L. Moore, III. - Assistant Director, Directorate for EHR at the NSF, Sudip Parikh- AAAS CEO/Executive Publisher of the *Science*, and James Holley, Jr. - Assistant Professor, University of Michigan. For our opening plenary keynote, we will have Joey Womack - Founder & CEO Goodie Nation, followed by Dr. Wanida Lewis - Founder and CEO of Crescendo Foods in Ghana, and we will close with Shirley Malcom - Senior Advisor to the AAAS CEO and Director of the SEA CHANGE Initiative, and Derrick Brent - Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the US Patent and Trademark Office. Friday is packed with sessions that include a career panel (Jamerus Payton, Deirdre Roberson, and Aisha Lawrey) for students and a grants and resources panel (NSF, USPTO, SBA, FFAR, SBA, & NIH) for faculty. Saturday will kick off with our Showcase followed by the awards luncheon where winning teams will be announced.

Thanks to our AAAS Project Team: Allison Gonzalez, Claire Molloy, Elyse Menendez, Jeunice Lim, Janaya Thompson, Kathy Arias, Cassandra Jones, Michael Collela, Kavita Mittapalli, Nina de las Alas, and Debbie Igunbor; our NSF Program Officer: Carleitta Paige-Anderson, our AAAS leadership: Sudip Parikh, Shirley Malcom and Travis York, and our Advisory Board: Laura Collins, Ron Williams, Demetria Gallagher, Brandon Andrews, Dorothy Jones-Davis, Joyce Ward, Elli Fini, and LaKisha Greenwade. A special thanks to our sponsor VentureWell. As a professional society, AAAS is *working to advance science, engineering, and innovation throughout the world for the benefit of all people*. Please visit <https://iie.aaas.org/> to learn more about our HBCU Innovation Initiative.

Sincerely,

Iris R. Wagstaff

Neela White

Iris R. Wagstaff, STEM Program Director, NSF PI and Neela White, Project Director, NSF Co-PI



2022 AAAS HBCU Making and Innovation Showcase
Thursday, September 22nd - Saturday, September 24th
Hyatt Regency on Capitol Hill

Building a Community of Practice to Advance Innovation Capacity and Sustainability at HBCUs

Thursday, September 22nd

6:00pm – 7:00pm

Orientation

Room: Capitol Room AB

- Student & Faculty Welcome/Overview/Meeting Agenda – Neela White, Project Director, Inclusive STEM Ecosystems for Equity and Diversity (ISEED), AAAS
- Q & A
- Welcome video – James Holley, Jr, Assistant Professor, University of Michigan & Tuskegee University alumni
- Ice Breaker game and introductions
- Post-Session Survey

7:00pm – 8:30pm

Opening Plenary & Reception

Room: Capitol Room AB

- Welcome – Iris Wagstaff, Program Director, Inclusive STEM Ecosystems for Equity and Diversity (ISEED), AAAS
- Moderator and Introduction of Sudip Parikh, AAAS CEO – Travis York, Director, Inclusive STEM Ecosystems for Equity and Diversity (ISEED), AAAS
- AAAS Remarks – Sudip Parikh, Chief Executive Officer and Executive Publisher, Science Family of Journals, AAAS
- National Science Foundation Remarks – James Moore, Assistant Director, Directorate for Education and Human Resources, National Science Foundation
- VentureWell Remarks – Christina Tamer, Director, Program, Early-Stage Innovators and Venture Development
- Opening Plenary Keynote – Joey Womack, Founder & CEO Goodie Nation
- Opening Plenary Q&A – Joey Womack, Goodie Nation, Moderated by Travis York, AAAS
- Announcements – Iris Wagstaff, AAAS
- Post-Session Survey

Friday, September 23rd

8:00am – 9:15am

Breakfast Plenary

Room: Capitol Room AB

- Moderator/Introduction of Speaker – Iris Wagstaff, Program Director, Inclusive STEM Ecosystems for Equity and Diversity (ISEED), AAAS
- VentureWell Remarks – Terik Tidwell, Director, Inclusive Innovation
- Breakfast Plenary Keynote – Wanida Lewis, Crescendo Foods Ghana, *virtual
- Breakfast Plenary Q&A – Wanida Lewis, Crescendo Foods Ghana, moderator, Iris Wagstaff, AAAS
- Announcements – Iris Wagstaff, AAAS

- Post-Session Survey

9:15am – 9:30am

Break

9:30am – 11:00am

Student Session 1

Room: Capitol Room AB

- How to Leverage Social Media as a Student Inventor, Innovator, Maker, and Entrepreneur
 - Moderator: Brandon Andrews, Gauge, Shark Tank
 - Adrienne Sheares, ViviMae Labs
 - Joey Womack, Goodie Nation

9:30am – 11:00am

Faculty Session 1

Room: Congressional CD

- Technology Transfer at HBCU's
 - Session Presenters
 - Laura Collins, North Carolina A&T University
 - Ellie Fini, Arizona State University

11:00am – 12:30pm

Student Session 2

Room: Capitol AB

- Preparing for Life After College – The Role of Building and Leveraging Mentor Relationships in Innovation
 - Session Presenter
 - Marguerite Matthews, National Institutes of Health

11:00am – 12:30pm

Faculty Session 2

Room: Congressional CD

- Grants and Resources for HBCU Faculty
 - Session Presenters
 - Carleitta Paige-Anderson, NSF HBCU-UP & CREST
 - Ruth Shuman, NSF I-Corps + TIP
 - Jose Colom, NSF EPSCoR
 - LaKisha Odom, Foundation for Food and Agricultural Research (FFAR)
 - Joyce Ward, U.S. Patent and Trademark Office
 - Elden Hawkes Jr, U.S. Small Business Administration
 - Stephanie Fertig, U.S. National Institutes of Health - SBIR

12:30pm – 1:30pm

Working Lunch

Room: Capitol AB

- Internships, Fellowships, and Career Opportunities
 - Session Presenters
 - Dorothy Jones-Davis, Nation of Makers – Prize Challenges *virtual
 - LaKisha Odom – FFAR - FFAR Fellowship Opportunities
- Interviews with students/faculty/speakers *Location: Grand Canyon Room, 2nd floor

- Announcements – Iris Wagstaff, AAAS

1:30pm – 2:00pm **Break/Networking/Interviews**

- Interviews will continue during break *Location: Grand Canyon Room, 2nd floor

2:00pm – 3:30pm **Student Session 3** **Room: Capitol AB**

- The Critical Role of Failure – How to Fail Fast and Make Strategic Moves
 - Moderator: LaKisha Greenwade, Wearable Tech Ventures

2:00pm – 3:30pm **Faculty Session 3** **Room: Congressional CD**

- Collaborating with Sponsored Programs and Research
 - Session Presenters
 - Ron Williams, Coppin State University
 - Mistesinot Jiru, Coppin State University
 - Diana Vass, Coppin State University

3:30pm – 5:00pm **Student Session 4** **Room: Capitol AB**

- Career Pathways in Invention, Innovation, Making and Entrepreneurship
 - Moderator: Dorothy Jones-Davis, Nation of Makers
 - Aisha Lawrey, Amazon Web Services and AAAS If/Then Ambassador
 - Jamerus Payton, Carolina Chicken & Waffles
 - Deirdre Roberson, EUMelanin

3:30pm – 4:30pm **Faculty Session 4** **Room: Congressional CD**

- VentureWell Session - Faculty Funding: The Hidden Multiplier for I&E
 - Session Presenters
 - Demetria Gallagher, Vice President, Knowledge, Impact, Innovation
 - Hope Liu, Director of Program, Institutional Transformation in Higher Education

4:45pm – 6:00pm **Faculty Evaluations** **Room: Congressional CD**

- Faculty Evaluation Focus Group
 - Evaluators: MN Associates

5:00pm – 6:00pm **Student Session 5** **Room: Capitol AB**

- Showcase Pitch Final Practice

6:00pm Dinner on Your Own

Saturday, September 24th

7:15am – 7:55am Breakfast/Showcase Setup Room: Capitol AB

8:00am – 10:25am Showcase Pitch Competition Room: Capitol AB

10:25am – 10:30am Break/Transition from Showcase Room: Capitol AB

10:45am – 11:45am Faculty Session 5 Room: Congressional CD

- HBCU Faculty Input – HBCU Innovation Resources Toolkit
 - Session Moderator: Quincy Brown, Black ComputeHER

10:45am – 12:30pm Student Evaluation Focus Groups Room: Capitol AB

12:30pm – 1:30pm Awards Plenary and Luncheon Room: Capitol AB

- Moderator/Introduction of Speaker – Shirley Malcom, Senior Advisor to the CEO, and Director SEA CHANGE Initiative, AAAS
- Awards Plenary Keynote – Derrick Brent, Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office

1:30pm – 1:40pm Showcase Survey

1:40pm – 2:00pm Announcement of Winning Teams

2:00pm – 2:15pm Winning team pics

2:15pm Adjourn

***Additional interviews of students, faculty, and speakers who do not need to travel immediately to the airport will take place following the conclusion of the Showcase.**



Adrienne Shears

Adrienne Shears is the owner of the social media consultancy of ViviMae Labs.

For over ten years, Adrienne has created social

media marketing solutions for clients such as AARP, Discovery Education, Issa Rae (creator of HBO's Insecure), The Root, and more. You can find her industry expertise featured in ABC News, Adweek, PRWeek, Ragan's PR Daily, and more.

Adrienne is a proud graduate of Spelman College and has a master of arts in communication from Johns Hopkins University.



Aisha Lawrey

STEM advocate, Aisha Lawrey, has 25 years of experience on this journey. Working in industry, government,

nonprofits, and education she knows how to engage many different stakeholders, at all levels. Her focus is on increasing the number of women and minorities in engineering.

Aisha currently works for AWS (Amazon Web Services), in Training & Certification as the Head of Global Education Programs for Cloud Career Training Programs. She covers AMER, EMEA, and APJ so the world basically. Her role represents all 5 of the Education Programs spanning K-12, higher education, and professional skilling, reskilling, and upskilling learners. The goal is to show multiple pathways

to learners that lead to professionals joining the cloud workforce.

Aisha obtained a Master of Public Policy and Administration from Rutgers University and a Bachelor of Engineering degree in Electrical Engineering from Stevens Institute of Technology. A New Jersey native, Aisha now resides in Maryland with her husband and 15-year-old twins.



Brandon Andrews

Brandon Andrews is co-founder of Gauge; an AI-driven mobile market research platform connecting brands

to consumers and influencers to identify opportunities and avoid mistakes. As Senior Consultant at Values Partnerships he leads the company's work on technology and entrepreneurship, including leading a nationwide casting tour focused on bringing more diverse ideas and voices to ABC's, Shark Tank and building inclusive ecosystems.

In 2021, he led casting for Bet on Black – a new business show on REVOLT highlighting Black entrepreneurs. Named a Global Innovation Fellow by the U.S. Department of State, he has traveled the world speaking and hosting events on entrepreneurship and innovation.

Committed to bringing resources to diverse entrepreneurs, he started The Investment event series to educate entrepreneurs and investors of color.

In addition to working with entrepreneurs Brandon has helped lead nationwide engagement campaigns including jeen-yuhs: A Kanye Trilogy (2022), Tulsa Burning: The 1921 Race Massacre (2021), John Lewis: Good

Trouble (2020), If Beale Street Could Talk (2018), Fences (2016), ROOTS (2016), and Concussion (2015).

In 2018, he managed the #TechtoWealth Tour with DJ Young Guru. Designed to get 10K people of color coding, #TechtoWealth brought tech events to WeWork locations in the final six OTRII Tour cities + BET Hip Hop Awards with \$1M in coding scholarships available from Opportunity Hub and Flatiron School.

He worked with NBCUniversal Cable Entertainment to refresh their Erase The Hate campaign, including building the first accelerator for organizations fighting hate. In 2015, he worked with A+E Networks, iHeartMedia, and the United Way to develop the Shining A Light Concert for Progress on Race in America, Shining a Light Fund, and Conversations on Race in America documentary.

Previously, Brandon empowered public affairs, technology, and real estate clients at MWWPR. He spent 5 years in the United States Senate where he handled technology, small business, and defense policy.

He is Chairman of the DC Commission on National and Community Service. A former fashion model, he serves on the DC Commission on Fashion, Arts, and Events and works with fashion/beauty entrepreneurs.

He provides commentary on policy, politics, business and tech on TV, radio, and the web.

A former Division-1 track athlete, Brandon is a graduate of Oral Roberts University.



Carleitta Paige- Anderson

Carleitta Paige-Anderson currently serves as Program Director for the Historically Black

Colleges and Universities Undergraduate Program (HBCU-UP) in the Division of Human Resource Development at the National Science Foundation (NSF). Her academic journey began at Virginia Union University (VUU), where she developed a passion for basic science research and earned a BS in Biology. After obtaining a PhD from Wake Forest University and completing a post-doctoral fellowship at Johns Hopkins University, she returned to VUU. Over the years, she established a research program investigating biochemical signaling mechanisms in disease-causing bacteria and viruses. By leveraging her scientific expertise to integrate research into the academic curriculum, she was selected as a 2013-2014 Senior Fulbright Scholar in Surabaya, Indonesia at Universitas Airlangga. At VUU, she also served as the founding director of the VUU Center for Undergraduate Research, Dean of the University College, and Vice-President for Student Development and Success. Her collective efforts are rooted in enhancing the research and education capacities of HBCUs, a community she is excited to serve in her current role. Paige-Anderson attributes much of her success to the support of her family and friends.



**Christina
Tamer**

Christina oversees VentureWell's early stage innovator and venture development programs. She has

a decade of experience working with startups as an investor, instructor, coach, and program manager. Prior to VentureWell, she worked at a seed-stage impact venture fund where she built a portfolio of 18 companies around the world. Christina holds an M.B.A. and a B.S. in Management from the University of Massachusetts Boston.



**Deirdre
Roberson**

I am a Chemist. I am a Creative. I am a woman of color. EUMELANIN is a clothing and jewelry brand that merges my

scientific and creative side. I wanted to use my talents and life experiences to address issues of colorism that I've faced in my community that exist around the world.

I was born and raised in Detroit, MI, which currently has the largest percentage of African Americans in the United States at 84%. I grew up in Southwest Detroit, which is one of the most diverse populations in the city comprised of African Americans, Latin Americans, and Arab Americans. I witnessed first hand how our skin tones and shades were used to separate and invalidate us. EUMELANIN is a brand designed to challenge behavior that does not honor any of us. To bring to the forefront behaviors we have accommodated and tolerated because we were afraid to speak

up. I envision a brand that has an impact on colorism globally. A brand that celebrates self-love holistically and combats negativity associated with black and brown people around the world because of their skin tone.

EUMELANIN is not only my brand it has grown into something more, my therapy. I believe we have a responsibility by the way we live our lives and when we open our mouths to empower, to love and to teach; so I created EUMELANIN.



**Demetria
Gallagher**

Demetria is a tireless advocate for entrepreneurs, communities, businesses, and policies that positively impact the revitalization of American cities.

Armed with actionable data and localized research, Demetria combines smart public-private partnerships, no nonsense advocacy, and creative financial capitalization to build sustainable, equitable residential and commercial opportunities. For more than six years at the U.S Department of Commerce in Washington, D.C., Demetria served as a policy analyst and White House Political Appointee in the administration of President Barack Obama. Aligned with the Obama Administration's focus on inclusive innovation, Demetria built a new program designed to connect STEM-oriented minority-owned companies with the immense science and technology resources located in the federal government. As lead innovation policy analyst at the Commerce Department's Minority Business Development Agency (MBDA), Demetria spearheaded a cross-agency collaboration to support the growth of minority-owned business with a revenue of \$1M or more. She supported several White House initiatives focused on the Commerce

Department's business development efforts, and shaped policy creation and the formulation of key partnerships with a range of national stakeholders. In 2015m Demetria was appointed Senior Advisor for Policy and Inclusive Innovation at MBDA. She conceived, designed, and scaled up a revolutionary program that connected STEM-oriented businesses and young entrepreneurs to a vital, historic aspect of America's business development stream: high-quality scientific expertise and quantitative testing and research that aids the commercialization of technological discoveries born in the nation's 300+ federal laboratories. Known as Tech Transfer or "T2," the process of connecting private companies to federally-developed science and technologies is a time-tested feature of the nation's economic growth during the past century, resulting in major commercial products such as GPS and mobile phones. Now, as Senior Director for Social Innovation of the Jamii Group, Demetria Gallagher leads the company's focus on cross-sector business development, innovation, and social impact. Demetria manages all aspects of research development, strategic alliances and social impact metrics for a range of national clients. Demetria is also founder and President of UrbanCycle, a social impact real estate incubator she created to combat urban development barriers in her home town of Chicago.



Derrick Brent

Derrick Brent is the Deputy Under Secretary of Commerce for

Intellectual Property and Deputy Director of the United States Patent and Trademark Office (USPTO). He serves as the principal advisor to Kathi Vidal, Under Secretary of Commerce for Intellectual Property and Director of the USPTO, for one of the largest intellectual property (IP)

offices in the world, with more than 13,000 employees and an annual budget of more than \$4 billion.

Deputy Director Brent has served in all three branches of the federal government and the private sector. He clerked for the Hon. Algenon L. Marbley, Chief Judge of the U.S. District Court for the Southern District of Ohio, and served for six years as a Senior Trial Attorney at the U.S. Department of Justice, Civil Rights Division, where he received a Special Achievement Award for his trial work. Also, he served as a Chief Counsel in the U.S. Senate, where handled IP issues along with other areas such as constitutional law, civil rights, and judicial nominations.

Deputy Director Brent's experience in the private sector includes serving as Vice President/Associate General Counsel for Masimo, on the leadership team at Cut Golf, and as an engineer at General Motors.

Deputy Director Brent received a Bachelor of Science degree in mechanical engineering from The Ohio State University and a Juris Doctor degree from the Northwestern University School of Law (now the Northwestern University Pritzker School of Law).



Dianna Vass

Dianna Vass Ph.D. is the Director of Sponsored Programs and Research within the Division of Academic Affairs at Coppin State University.

Designing programs for improved leadership, collaboration, and operations, Dr. Vass is an innovative executive and a passionate advocate for experiential education and transdisciplinary research across an institution, metro area, and

the globe. Her professional achievements include reducing a direct marketer's apparel returns by 20 percentage points employing quality training and partnering with the supply chain on sizing and fit standards and annually fundraising \$2.2 Million for the College of Engineering at North Carolina A&T.

Her research projects with wearer needs and sewing dynamics improve solutions at the intersections of creativity and strategy, innovation and operations, community well-being, and quality of life. Dr. Vass earned her MBA from the University of Delaware and her Ph.D. in Total Quality Management and Training within Apparel/Textile Product Manufacturing Organizations from Virginia Tech.



Dorothy Jones-Davis

Dorothy Jones-Davis is the Executive Director of Nation of Makers, a nonprofit whose mission is to

support America's maker organizations through advocacy, resource sharing, and the building of community within the maker movement and beyond. In this role, she is deeply interested in creating connections between a diversity of makers, enabling them to use their collective skills to harness solutions for the world's challenges – grand and small.

With a Ph.D. in Neuroscience, Dorothy has previously held roles at the National Science Foundation, the Foundation for the National Institutes of Health, and the University of California, San Francisco.

Dorothy's interest and passion for making began when she was a child (see her Medium post on Why She Makes), tinkering with broken electronics with her dad. In her spare time, she now enjoys carrying on the tradition of building

and making, with her teen daughter.

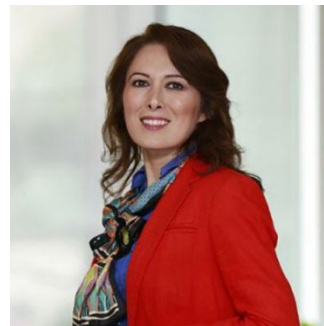


Elden Hawkes

Elden Hawkes serves as the Partnership and Innovation Specialist, a role that supports the advancement of the Small Business Innovation Research/Small

Business Technology Transfer (SBIR/ STTR) programs. His primary duties include managing the agency's Federal and State Technology (FAST) Partnership Program. Other duties include outreach efforts targeting Minority Serving Institutions (MSIs) and SBIR Road Tours.

Before SBA, Elden spent seven years with USDA's National Institute of Food and Agriculture (NIFA) where he helped grow the USDA's SBIR program as its program specialist and program manager. He holds a degree in Environmental Science/Marine Science and a Master's in Food and Agricultural Science, both from the University of Maryland Eastern Shore.



Ellie Fini

Dr. Ellie Fini is an Associate Professor at Arizona State University, an Invention Ambassador at the American

Association for the Advancement of Science, a Fulbright Scholar of Aalborg University of Denmark, a Senior Sustainability Scientist at the Global Institute of Sustainability and Innovation and Director of the Innovation Network for Materials, Methods and Management. Her research focuses on developing sustainable

novel materials for use in the built environment.

In addition to more than 200 scholarly publications and numerous invited talks, her research has been featured by BBC Women in STEM, Science Nation, Wired Magazine, and CNBC. She is editor of the ASCE Journal of Materials and Journal of Resources, Conservation & Recycling. She has served as the president of ASCE's North Carolina Northern Branch and a program director of the National Science Foundation. Her achievements have been recognized via multiple awards including an NSF CAREER award, ASEE Gerald Seeley award, BEYA Emerald STEM Innovation award, NC BioTech Research Excellence award and WTS Innovative Transportation Solution award to name a few.



Hope Liu

Hope leads the Higher Education Catalyst Team, supporting faculty in developing programs that

cultivate student innovators and promote institutional change. Prior to VentureWell, she was the founding Dean of the School of Continuing and Online Learning at Cardinal Stritch University and was the Senior Director of Knowledge and Learning at Social Current, a national nonprofit that services the social sector. She has a Ph.D. in Curriculum and Instruction from Virginia Tech.

in the Inclusive STEM Ecosystems for Equity and Diversity (ISEED) Department of AAAS where she manages programs a ~\$20 Million Dollar portfolio focused on broadening participation in STEM, workforce development and inclusive innovation at the undergraduate, graduate, and postdoctoral levels. She served as a 2015-2017 AAAS Science and Technology Policy Fellow at the DOJ National Institute of Justice Office where she led an agency-wide diversity and inclusion initiative. She is a native of Goldsboro, NC with a BS and MS in Chemistry from UNC-Greensboro and NC A&T State Universities respectively; and a PhD in Science Education from North Carolina State University. She worked as a research chemist at the Dow Chemical Company for 15 years where she led analytical project teams and company-wide diversity initiatives. She has over 20 years of STEM outreach and advocacy developing strategic partnerships between industry, academia, and community organizations.

Iris is also a social scientist with a research focus on examining factors that predict science self-efficacy, science identity, and STEM career intent in students. She serves on the Boards of several organizations that include the National Organization of Black Chemists and Chemical Engineers (NOBCChE), the Chemical Society of Washington (CSW), and Science, Engineering, and Math Links (SEM). She also serves as an adjunct chemistry professor at UNC-Greensboro. She is the Founder and Executive Director of Wagstaff STEM Solutions, an education and diversity consulting company. She has received several honors that include the 2020 DC Metro HBCU Alumni Alliance Education Award, the 2019 BEYA Science Trailblazer Award, and the 2018 NOBCChE Presidential Award for Mentoring.



Iris Wagstaff

Dr. Iris R. Wagstaff is a scientist, educator, mentor, researcher and STEM advocate. She currently serves as a STEM Program Director



Jamerus Payton

Mr. Jamerus Payton, a native of Eastern North Carolina (ENC), has a diverse portfolio of unique experiences across

various cultures and socioeconomic backgrounds. He has over 15 years of experience in Operations and is a nationally and internationally recognized HBCU Advocate, Entrepreneur, Author and Speaker.

Mr. Payton is an MBA candidate at East Carolina University (College of Business), a two-time graduate of North Carolina Agricultural & Technical State University (School of Technology) and a graduate of Southern Methodist University (Cox School of Business).

He is the Owner of Carolina Chicken & Waffles (CCW), a family-owned and operated food and beverage company. He is a major advocate for higher education, especially Historically Black Colleges and Universities (HBCUs), and the creation and sustainability of the next generation of leaders, business owners and investors. His love for higher education, STEM, community and combating poverty led him to co-found HBCU Wall Street and The Jamerus & Amber the Payton Family Foundation, Inc.

He has served on various nonprofit boards, committees and advisory boards including East Carolina University Graduate and Professional Student Senate, Net Impact Black Professionals Chapter (NIBPC), United Way of Cumberland County, My Brother's Keeper of Wake County, and the Department of Applied Engineering Technology in the College of Science and Technology at North Carolina A&T State University and Stillman College School of Business, Entrepreneurship, and Computational & Information Sciences (SBECIS) and the Jean Mills Health Symposium.

He is a 2017 Washington, DC The Made Man (TMM) Honoree and also a graduate of United Way's Leadership Development Program. In 2018 he was a George Kaiser Family Foundation (GKFF) Dream Tulsa Cohort, a Black Enterprise Modern Man 100 Men of Distinction Honoree, a Black Enterprise Tech Fellow and a Young Alumni Influencer Honoree for The Black Varsity. He is a 2019 North Carolina New Leaders Council Alumni and a 2019 Order of the Living Waters Award recipient from African Diaspora Nation with the endorsement of the African Union. In 2022, he became a Senior HBCUvc Fellow and the first place winner for the fifth annual Pirate Entrepreneurship Challenge (PEC).

He has been featured in media outlets such as SiriusXM, AspireTV, Black Enterprise, NBCBlk, The Motley Fool and BestColleges. Mr. Payton is the author of the book, "HBCUNomics: A Story Of The Power Of Black College Students, Economic Self-Sufficiency and Financial Freedom".



James Holly, Jr.

Dr. James Holly, Jr. is an Assistant Professor of Mechanical Engineering and core faculty member within the Engineering Education Research program

at the University of Michigan. He earned a bachelor's degree from Tuskegee University and a master's degree from Michigan State University, both in Mechanical Engineering. He earned his doctorate in Engineering Education from Purdue University. His research paradigm is shaped by his experiences growing up in a Black church within a Black city and later studying engineering at Tuskegee University, a Black institution, three spaces where Blackness

is both normal and esteemed. As such, he sees his teaching, research, and service as promoting pro-Blackness—affirming the humanity and epistemic authority of Black people—in engineering education. His scholarship focuses on the ways disciplinary knowledge (i.e., mechanical engineering) reinforces racialized power, the role of culture and cognition in teaching and learning, and preparing pre-college engineering educators to identify and counteract racial inequity. He directs the Afro-Epistemic Academics, a research group whose focus is to esteem the heritage knowledge of Black engineering students, faculty, and researchers, along with nourishing their self-knowledge; also, to support non-Black scholars committed to accomplishing racial justice in engineering.



James L. Moore III.

The U.S. National Science Foundation has selected James L. Moore III to head the Directorate for Education and Human Resources, or EHR, which supports research

that enhances learning and teaching, and broad efforts to achieve excellence in STEM education at all levels and in all settings.

Since 2018, Moore has been vice provost for diversity and inclusion and chief diversity officer at The Ohio State University. In this role, he has managed a robust diversity and inclusion portfolio, serving more than 6,000 undergraduate, graduate, and professional students and a myriad of faculty, postdocs, and staff throughout the university. Simultaneously, he served as the first executive director of the Todd Anthony Bell National Resource Center on the African American Male and is a

Distinguished Professor of Urban Education in the College of Education and Human Ecology.

"James L. Moore III brings great leadership skills and vision to our agency and is poised to develop new mechanisms and models for reaching the missing millions in our country," said NSF Director Sethuraman Panchanathan. "His efforts will inspire the next-generation STEM workforce as they unleash their potential and advance discovery and innovation across the United States. I am thrilled to have him join the agency at this important time when access to quality STEM learning experiences for individuals, family and communities is recognized as a national imperative."

Moore is internationally recognized for his work on African American males. His research focuses on a variety of education topics, including STEM education, gifted education, multicultural and urban education, and higher education. He has published over 160 publications, received nearly \$40 million in funding, and given over 200 scholarly presentations and lectures throughout the United States and other parts of the world. Moore is no stranger to NSF and has received nearly \$9 million in funding from the agency throughout his career.

"Becoming the new EHR assistant director is an opportunity that I do not take lightly. It extends the opportunity to be a part of the director's brain trust in bringing the 'Missing Millions' and developing critical strategy — within NSF — to attract, inspire, and cultivate more U. S. citizens for careers in STEM," said Moore. "With the recent passing of the 'CHIPS and Science Act,' there are immense opportunities to improve STEM educational and workforce outcomes. I am very excited about the possibilities and ready to run the marathon at a sprinter's pace to put forth strong initiatives that build a robust, diverse, and inclusive STEM workforce throughout the country."

NSF's EHR Directorate invests in the development of people and knowledge, supporting the development of a diverse and well-prepared workforce of scientists, technicians, engineers, mathematicians and educators and a well-informed citizenry that have access to the ideas and tools of science and engineering. In his new role, Moore hopes to build on the successes of the previous assistant directors. "I am very interested in pinpointing ways to improve STEM preparation and pathways in rural and urban, underserved and under-resourced communities across the United States and advancing scientific knowledge on how best to improve STEM educational and workforce outcomes for talented individuals in some of the most distressed communities across the nation," Moore added.

From 2015 to 2017, Moore served as NSF program director for the Broadening Participation in Engineering program and also helped launch NSF INCLUDES, a national broadening participation initiative. "I am very familiar with the EHR Directorate and understand its significance in broadening participation in STEM, supporting STEM education research and cultivating key educational and workforce pathways throughout the STEM enterprise. I look forward to working with colleagues across the agency and beyond to advance the broad portfolio of EHR," Moore added.

Since 2018, he has been annually cited by *Education Week* as one of the 200 most influential scholars and researchers in the United States. Throughout his career, he has received many prestigious awards, honors and distinctions. Notably, he was selected as an American Educational Research Association Fellow, American Counseling Association Fellow, American Council on Education Fellow and a Big Ten Committee on Institutional Cooperation Academic Leadership Program Fellow. Earlier this year, the Association of Public and Land-Grant Universities recognized

him with its highly regarded Michael P. Malone International Leadership Award and in 2021, the American Council on Education honored him with the Reginald Wilson Diversity Leadership Award.

Moore has a bachelor's degree in English education from Delaware State University and master's and doctoral degrees in counselor education from Virginia Tech.

Moore will begin his NSF appointment on August 22, 2022.



Joey Womack

Joey Womack's goal is to positively impact 1 billion people by the year 2039. Part startup coach, part super-connector, he is the Founder of Goodie Nation, a tech nonprofit that empowers everyone to play a

role in using innovation to reduce disparities in education, environmental sustainability, financial access, health, and safety. He is also Founder of Amplify 4 Good, a mission-driven agency that uses rapid problem-solving to help large companies, nonprofits, and government agencies create social impact, and Co-Founder of Atlanta Black Tech.

Joey was bitten by the entrepreneurial bug in 2002 when he launched digitalguestlist.com as a graduate student at Florida A&M University. He grew the site to 80,000 users, and advertised thousands of events for Fortune 500 companies, agencies, and high-profile promoters during special events like NBA All-Star Weekend, Super Bowl Weekend, and Essence Music Festival.

Joey received his MBA from Florida A&M University in the Spring of 2003, where he was also initiated into Alpha Phi Alpha, Fraternity, Inc.



Jose Colom-Ustariz

Dr. Colom-Ustariz is currently an NSF EPSCoR Program Director. He has extensive experience in

academia, in both research and education, as well as in administration. Dr. Colom-Ustariz joined EPSCoR after more than 25 years as professor at the UPR-Mayaguez, where he was the Electrical and Computer Engineering Department Chair from 2015-2018. His research interests are in the area of Dual-Pol Weather Radars and Microwave Circuits.

He has a Ph.D. in Electrical Engineering with a focus in Microwave Engineering from Penn State University, a MSEE from UMass in Microwave Remote Sensing and a B.S. in Electrical Engineering from the University of Puerto Rico at Mayaguez. His research interests includes the design and development of Weather Radars and Microwave Circuits.



Joyce Ward

Joyce is the Director of the Office of Education (OE) for the United

States Patent and Trademark Office.

Her work expands the influence of the outreach offerings of the USPTO to provide K12 educators and students with unique learning experiences and resources designed to integrate knowledge of invention, innovation, entrepreneurship, and STEM. Her office encourages the creation and protection of

intellectual property. Under Joyce's direct leadership the OE successfully conceived, and implemented numerous projects which have garnered national recognition for the agency, such as the Science of Innovation series, a collaboration between the USPTO, the National Science Foundation, and NBC Learn; the exemplar National Summer Teacher Institute on Innovation, STEM, and Intellectual Property(NSTI); an Intellectual Property patch with the Girl Scouts organization, and the first USPTO Inventor Trading Card series. Prior to her current position Joyce was the Director of Program Support and Intellectual Property for the National Inventors Hall of Fame (NIHF). Before going to NIHF, she served as a Trademark Examining Attorney and later as an Education Specialist in the Office of Public Affairs at the USPTO. Joyce received her undergraduate degree from the University of North Carolina at Chapel Hill and her law degree from the Georgetown University Law Center in Washington, DC.



LaKisha Greenwade

LaKisha Greenwade is an award-winning Innovator, Tech Ecosystem Founder, Forbes Leadership Coach,

and Harvard University Guest Lecturer.

As the founder of Wearable Tech Ventures (501c3), she leads the charge to support 100 wearable startups by 2030 led by underrepresented founders. In 2022, Wearable Tech Ventures hosted the world's largest wearables hackathon. LaKisha highlights founders and innovators as host of the Wearable Takeover podcast.

Her accolades include Innovator of the Year, Start Up Mentor of the Year, Maryland Leading

Women honoree, 3x SXSW Speaker and twice as a 40 under 40 Leader.

After years of leading Innovation efforts for corporations and the Federal Government, she earned a Design Thinking certification from MIT. She received her B.S. in Economics from The Ohio State University, MBA from University of Maryland College Park, and MS Marketing education at Johns Hopkins University.

Originally from Akron, OH, she resides in Baltimore, MD.



LaKisha Odom

Dr. LaKisha Odom joined the Foundation for Food & Agriculture Research (FFAR) in 2016 as a scientific program director

to pursue her commitment to promoting the use of innovative science and interdisciplinary thinking to tackle today's complex challenges in food and agriculture. She is also committed to cultivating increased diversity in a new generation of food and agriculture scientists. In her current position, she has championed work force development programs to train the future leaders in Agriculture and has developed a portfolio of over \$60 million dollars in public private partnership to support soil health.

LaKisha received her bachelor's degree from Tuskegee University, her master's degree from The George Washington University and her doctorate from Tuskegee University.



Laura Collins

Laura Collins, Ph.D. is the Director of Intellectual Property Development and Commercialization at North Carolina Agricultural &

Technical State University and is responsible for A&T's IP portfolio and technology transfer operations. In her twelve years as the university's patent agent, the number of patents from campus research has grown from 11 to over 55. In the four years she has been responsible for licensing, the university's cumulative licensing revenue has increased by over 50%. Before coming to A&T, Laura spent ten years with an Intellectual Property law group in San Diego, supporting patent prosecution and patent litigation. She has a Ph.D. in Chemistry from UNC Chapel Hill and undergraduate degrees in Chemistry with Honors and History from Bryn Mawr College in Philadelphia.



Marguerite Matthews

Marguerite Matthews, PhD is a program director in the Office of Programs to Enhance Neuroscience Workforce Diversity at the National Institute

of Neurological Disorders and Stroke and manages diversity initiatives and programs providing research training and career development for underrepresented students and early career investigators. Prior to NINDS, she served as a 2016-2018 AAAS Science & Technology Policy Fellow in the Office of the Director at the National Institutes of Health, doing policy planning and implementation for

the biomedical research workforce. Dr. Matthews is a proud alumna of Spelman College, where she earned a BS in biochemistry. She received a PhD in neuroscience from the University of Pittsburgh and completed a postdoctoral fellowship in behavioral neuroscience at the Oregon Health & Science University (OHSU). Through her experiences as a Black woman in the sciences, Dr. Matthews is invested in promoting equitable and inclusive practices that enhance the STEM workforce.



Mintesinot Jiru

Mintesinot Jiru holds a PhD in Applied Biological Sciences from Gent University (Belgium) and is a Professor and Chair of the

Department of Natural Sciences at Coppin State University. He has over 20 years of teaching and research experience in areas of climate change and environmental contaminants. Dr. Jiru has done extensive work on land degradation, food security, and water management issues in Africa. His research focuses on understanding the socio-environmental and biophysical issues encompassing water quality in Baltimore's watersheds. Currently he is leading a research program on emerging environmental contaminants with a focus on microplastics, toxic heavy metals and pharmaceuticals (mainly estrogen in water). Dr. Jiru serves as the chief editor for the American Journal of Experimental Agriculture. He is a member of the External Advisory Board for the National Socio-environmental Synthesis Center.



Neela White

Neela White is a Project Director in the Inclusive STEM Ecosystems for Equity and Diversity (ISEED) department at the American

Association for the Advancement of Science (AAAS). Her portfolio of projects at AAAS have been centered on broadening participation in STEM, and inclusive innovation at the undergraduate, graduate, postdoctoral levels, and professional levels. She has served as an external evaluator for multiple projects including the NSF INCLUDES Early STEM Engagement for Minority Males (eSEM) project and the Verizon Innovative Learning Summer Program for Minority Males at Morgan State University. Her areas of focus have been within the sectors of invention; innovation; entrepreneurship; HBCUs, Science, Technology, Engineering and Math (STEM) education; Maker movement; international research collaboration; and diversity, equity and inclusion in science. Neela is a 2003 graduate of Temple University.



Quincy Brown

Quincy Brown is in her second tour as a Senior Policy Advisor in the White House Office of Science and Technology

Policy (OSTP). Prior to re-joining the White House, she was a Senior Director for Innovation Research at AnitaB.org. She has also served as a Program Director for STEM Education Research at the American Association for the Advancement of Science (AAAS). She is a leader in STEM and Computer Science education and workforce development in PK-20 and has been

supporting Black women and girls in computing for nearly two decades.



Ronald Williams

Ronald (Ron) C. Williams, Ph.D. has served in higher education for 36 years, spending 26

years as a faculty member in the Coppin State University (CSU) College of Business and serving as Interim Dean from 2013 until 2017.

Dr. Williams is well-known for his groundbreaking research in the makerspace movement and contributions to workforce development through his work with The Century Foundation and Urban Manufacturing Alliance. An innovative thought-leader on economic justice matters, he introduced the term “ingepreneurship” (inge... as in ingenuity) in 2015 as a framework for advancing positive economic mobility in underserved communities.

Dr. Williams holds a Ph.D. in management and organization from George Washington University with concentrations in organization behavior & development and the management of science, technology, & innovation. He serves on the AAAS HBCU Making & Innovation Advisory Board, the Open Works Board of Directors, and as President and Chair of the Urban Manufacturing Alliance.



Ruth Shuman

Ruth Shuman joined the National Science Foundation in August 2009. She is currently serving

as Program Director for the I-Corps Program. She was the former Program Director for the Biological Technologies (BT) topic area in the SBIR/STTR Program. Before coming to NSF, she was the founder, president, and CEO of a successful venture-backed life science company, Gentra Systems, Inc., that developed, manufactured, and sold products for genetic testing and research to clinical and research laboratories worldwide. Following Gentra’s acquisition, she held various consulting/advisory positions with start-up companies, and was CEO-In-Residence for Life Science with the University of Minnesota’s Venture Center evaluating the business potential of University-developed technology. Ruth began her career as a faculty member at North Carolina State University, and was a pioneer in the development of gene transfer and genetic engineering technology. Her area of technical focus at NSF is biological and biomedical technologies, and she has a keen interest in synthetic biology and metabolic engineering. She holds a Ph.D. from the University of Minnesota in the area of Genetics and Cell Biology.



Shirley Malcom

Shirley Malcom, PhD, is senior advisor to the CEO and Director of SEA Change at the

American Association for the Advancement of Science (AAAS). In her more than 40-year tenure at the Association she has worked to improve the quality and increase access to education and careers in STEM as well as to enhance public science literacy. Dr. Malcom is a trustee of Caltech and regent of Morgan State University. She is a former member of the National Science Board, the policymaking body of the U.S. National Science Foundation, and served on President Clinton’s Committee of

Advisors on Science and Technology. Dr. Malcom, a native of Birmingham, Alabama, received her PhD in ecology from the Pennsylvania State University, masters in zoology from UCLA, and bachelor's with distinction in zoology from the University of Washington. In addition, she holds 17 honorary degrees.

Dr. Malcom is a former high school science teacher and university faculty member. She serves on the boards of the Heinz Endowments, Public Agenda, National Math-Science Initiative and Digital Promise Global. In 2003, Dr. Malcom received the Public Welfare Medal of the U.S. National Academy of Sciences, the highest award given by the Academy.



Stephanie Fertig

Ms. Stephanie J. Fertig is the HHS Small Business Program Lead in SEED (Small business Education and Entrepreneurial Development) at the National

Institutes of Health (NIH). She currently oversees the Health and Human Services (HHS) Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, which includes the NIH SBIR and STTR programs. The HHS SBIR and STTR programs are congressionally mandated set-aside programs that provide over \$1.2 billion dollars per year to small business concerns. Prior to joining SEED, she managed the SBIR and STTR Programs at the National Institute of Neurological Disorders and Stroke (NINDS). During her over 15 years at NIH she has led the development and implementation of multiple programs focused on small businesses and

translational research. Ms. Fertig has a Bachelor of Science degree in Chemistry with a major in Physics from the University of Virginia and a Master of Business Administration from the University of Maryland's Robert H. Smith School of Business.



Sudip Parikh

Sudip Parikh, Ph.D., became the 19th chief executive officer of the American Association for the Advancement of Science (AAAS) and

executive publisher of the Science family of journals in January 2020. Parikh has spent two decades at the nexus of science, policy, and business.

Immediately prior to joining AAAS, Parikh was senior vice president and managing director at DIA Global, a neutral, multidisciplinary organization bringing together regulators, industry, academia, patients, and other stakeholders interested in healthcare product development. He led strategy in the Americas and oversaw DIA programs that catalyzed progress globally toward novel regulatory frameworks for advanced therapies not amenable to existing regulations.

Prior to DIA, Sudip was general manager of the Health and Consumer Solutions business unit and vice president at Battelle, a multibillion-dollar research and development organization. He led a \$150 million business unit with over 500 scientific, technical, and computing experts performing basic and applied research, developing medicines and healthcare devices, and creating advanced analytics and artificial intelligence applications to improve human health. Previously, Parikh led Battelle's global AgriFood business unit. Headquartered in London and Geneva, this unit provided

environmental fate research and agriculture product development services from laboratories throughout Europe and the United States.

From 2001 to 2009, Parikh served as science advisor and professional staff to the United States Senate Appropriations Committee, where he was responsible for negotiating budgets for the National Institutes of Health (NIH), Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, Biomedical Advanced Research and Development Authority, and other scientific and health agencies. A key legislative liaison to the research and development ecosystem, Parikh was on the frontlines of many science policy issues debated during that time, including embryonic stem cell research, cloning, disease surveillance, bioterrorism, cyber security, and doubling the NIH budget.

An active member of the scientific advocacy community, Parikh serves as a board member and officer for several impactful organizations, including Research!America, Friends of Cancer Research, and ACT for NIH. He has received multiple public service awards, including recognition from the American Association of Immunologists, the National AIDS Alliance, the Coalition for Health Services Research, and the Juvenile Diabetes Research Foundation.

Sudip is committed to early STEM education and, as a parent of three energetic young children, he prioritizes volunteering as a mentor for Science Olympiad teams at two elementary schools.

Early in his career, Parikh was a Presidential Management Intern at the NIH. He was awarded a National Science Foundation Graduate Research Fellowship while earning his Ph.D. in macromolecular structure and chemistry from the Scripps Research Institute in La Jolla, Calif. There, he used structural biology and biochemistry techniques to probe the mechanisms of DNA repair enzymes bound to

DNA. The son of Indian immigrants who worked in the textile and furniture manufacturing plants of North Carolina, Parikh completed undergraduate studies at the University of North Carolina at Chapel Hill, first as a journalism major before switching into materials science.



Terik Tidwell

Terik leads VentureWell's efforts in creating a cohesive body of equity-centered programmatic work by expanding and creating new programs, frameworks, and partnerships that center innovators and institutions which have been historically marginalized or excluded from science & technology entrepreneurship & innovation. He brings experience in inclusive tech-based economic development, having worked with foundations, corporations, and federal agencies. Terik holds degrees in Finance, Marketing, and IT from Monmouth University, as well as certificates in Venture Capital Finance and Enterprise Design Thinking.



Travis York

Travis T. York, Ph.D., is the Director of Inclusive STEM Ecosystems for Equity & Diversity (ISEED) at the American Association for the Advancement of Science (AAAS). Dr. York's research and work focus on catalyzing and sustaining systemic change and transformation to achieve inclusive and equitable access and progress through STEM pathways into the STEM workforce. Within

AAAS, Dr. York provides leadership to a talented team who collaborate to create change in over 20 grant-funded projects and initiatives spanning all STEM fields and the entire educational pathway including AAAS's SEA Change Initiative, Science in the Classroom, ARISE Network, S-STEM Initiative, L'Oreal USA Women in Science Fellowships, and HBCU Making & Innovation Showcase.

Currently, Dr. York is a Co-PI on NSF INCLUDES Aspire Alliance - an effort to develop a more inclusive and diversified STEM faculty; and serves as a Co-PI on a U.S. Department of Education IES Assessment Grant titled, *Affording Degree Completion: A Study of Completion Grants at Accessible Public Universities* in collaboration with the Coalition of Urban Serving Universities and Temple University's Hope Center for College, Community, & Justice. Dr. York has authored numerous peer-reviewed articles and book chapters, and his most recent article, *Completion Grants: A multi-method examination of institutional practice*, is available in the *Journal of Student Financial Aid*. Dr. York is active within several professional associations and serves on the editorial review board of the *Journal of Diversity in Higher Education*.

Dr. York, a native of Charleston, South Carolina, received his Ph.D. in Higher Education Administration from The Pennsylvania State University, masters in Higher Education and bachelors with distinction from Geneva College. Dr. York also studied at Oxford University's Center for Medieval & Renaissance Studies through Keble College in 2003-04. Dr. York also supports AAAS's Committee on Opportunities in Science, which advises the association on matters related to increasing the representation of women and minorities in science, engineering, and related fields.



Wanida Lewis

Dr. Wanida Lewis is the CEO and Co-Founder of Crescendo Foods, a culinary hub in Accra, Ghana. Dr.

Lewis has over ten years experience leading programs, strategic partnerships and economic evaluation initiatives throughout the African continent. Previously, she was a Senior Economic Program Advisor in the U.S. Department of State's Office of Global Women's Issues and a Foreign Affairs Officer/AAAS Fellow in the Office of Agricultural Policy. In 2018, Dr. Lewis founded Young, Gifted, & Brown, LLC, a pipeline program supporting young Ghanaian women and entrepreneurs in STEM. In 2018, she was named by New America as one of thirty five "Black American National Security, and Foreign Policy Next Generation Leaders". In 2019, Young Professionals in Foreign Policy named her the "Gender Issues in Foreign Policy" Fellow. Dr. Wanida E. Lewis Food Science Fellowship Award Endowment was established in 2013 to provide fellowship funding for underrepresented graduate students in the Department of Food, Bioprocessing and Nutrition Sciences at North Carolina State University. She received a bachelor's degree in Chemistry from Saint Augustine's University, a master's degree in Analytical Chemistry from North Carolina Central University and a doctoral degree in Food Science from North Carolina State University.