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MOREHOUSE
COLLEGE

STEMUS

HBCU STEM UNDERGRADUATE SUCCESS RESEARCH CENTER

FALL 2020 | ISSUE 5

QUARTERLY NEWSLETTER

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This issue of the STEM-US Research Center newsletter contains stories and briefs aligned with the Center’s mission to tell the stories of excellence in STEM education at HBCUs.

– STEM Undergraduate Success (STEM-US) Research Center

MOREHOUSE COLLEGE RECEIVES \$9-MILLION GRANT TO BOOST STEM SUBJECTS

NSF-funded work will study STEM education, career success linked to HBCUs.

Morehouse College has received a \$9-million grant from the National Science Foundation (NSF) as a founding partner of the HBCU Undergraduate Success Research Center. The initiative is designed to increase educational and employment opportunities for minorities interested in STEM subjects: science, technology, engineering, and mathematics.

STEM-US Center researchers will study impactful STEM initiatives at 50 HBCUs. Those studies will produce data and a set of best practices that can be duplicated on a national scale to help mainstream state institutions and other liberal arts colleges graduate more minority students with STEM majors.

Researchers, based at Morehouse College, will particularly investigate how and why HBCUs are so successful in supporting the nation’s broadening participation efforts in STEM, as well as what systems or programs exist at HBCUs that facilitate this success. Morehouse, for example, is the nation’s top producer of Black men who go on to receive doctorates in STEM fields. Nationally, one-third of all Black students who have earned doctorates graduated with bachelor’s degrees from HBCUs.



Morehouse is partnering with Spelman College and Virginia State University. HBCU professors will conduct STEM-US research, and the work of the Center will help ensure that HBCUs play a leading role in revamping STEM education.

Morehouse College Receives \$9-Million Grant... cont'd

This Morehouse grant provides subaward funding for research efforts at Spelman College and Virginia State University, which works toward the STEM-US Center's research goals to understand why HBCUs are so successful in STEM education, and to share this information both locally and nationally.

"Investing in the institutional capacity of HBCUs and developing diverse STEM talent is part of NSF's longstanding commitment to broaden participation of groups traditionally underrepresented in STEM," said NSF Program Director Claudia Rankins, who manages the HBCU program. "The knowledge generated by this Center will detail what practices make HBCUs successful in educating Black students in STEM, and the Center will place HBCUs at the forefront of STEM education reform."

STEM-US researchers will conduct several initial projects, including a case study of 25 HBCUs, and studies on the scientific literacy necessary for success in STEM. The research will be accomplished in part by using a

psychological approach to examining the experiences of STEM students that are developmentally linked and culturally sensitive. The Center will also award stipends to students pursuing academic research in STEM.

"I am pleased that the NSF agrees with our vision that the success of STEM programs at Morehouse and other HBCUs should have a broader impact

on STEM literacy, persistence, and diversity," said Morehouse Provost Michael E. Hodge. "This Center will become a national hub for collaboration, research, and resources for successful STEM outcomes because it is designed within a culturally relevant framework focusing on assets and not deficits."

Dr. Lycurgus Muldrow, executive director of STEM-US, said the grant will continue to raise the profile of STEM programs at HBCUs.

"The grant will allow us to understand and tell the stories in HBCU STEM education—for us and the nation—thereby documenting the legacy of excellence in STEM education at HBCUs," said Muldrow, who serves as a director in the Office of Academic Affairs at Morehouse. "The grant will also allow us to contribute to future educational innovations in the computer sciences, in scientific literacy, and in research teaching laboratories.

"It will help us to continue to prepare students to enter into graduate school and careers in STEM education," Muldrow added. "We have several students who went on to grad school this year. Three were accepted into Ph.D. programs."

Funds for the NSF grant became available in September. ■

← Tweet



Claudia "Defender of HBCUs" Rankins
@STEMhasSoul

I am thrilled and excited to announce a \$9 million award from NSF HBCU-UP to @Morehouse with partners @SpelmanCollege and @VSU_1882 to study successful undergraduate STEM education practices at #HBCUs. This center is by HBCUs for HBCUs - for US. @jarrettcartersr @The107_hbcu

9:57 AM · Aug 18, 2020 · Twitter Web App

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Nationally, one-third of all Black students who have earned doctorates graduated with bachelor's degrees from HBCUs (Historically Black Colleges and Universities).

FACULTY FOCUS

Award-Winning Teaching, Research Distinguish Larry Blumer's Career

Biology professor, avid researcher has been an asset to Morehouse College for 30 years.



When Larry Blumer began college at the University of Michigan years ago, during the Vietnam War era, he decided to major in political science. Blumer wanted to help change the world, he said, by understanding politics.

"It was the times, of course," he recalls. "But soon, I realized politics was not where my passions lay."

So Blumer went in a different direction, into the world of environmental science and teacher training, to teach high school biology. Eventually, the Detroit native earned a bachelor's degree, a master's in zoology, and a doctorate in biological sciences, all from Michigan. That launched him on an academic path that has earned him many national grants, including a series of National Science Foundation grants that combine both research and teaching—grants in which Blumer has been the principal investigator.

And in 2007, Morehouse College also honored Blumer with its prestigious Vulcan Materials Company Award for Excellence in Teaching.

"The students in his classes benefit from his willingness to try something new," says Christopher Beck, Ph.D., an Emory University professor who has collaborated with Blumer in Atlanta for more than 20 years. "He's never afraid to try something new, especially if he thinks that it will engage his students and help them develop as scientists."

For the past nine years, Blumer has also worked with Morehouse colleague Alexandra Peister, Ph.D., on the SEA-PHAGES research course for undergraduates (Science Education Alliance-Phage Hunters Advancing Genomics and Evolutionary Science). SEA-PHAGES, sponsored by the Howard Hughes Medical Institute, was a significant departure from Blumer's previous work and "outside his comfort zone," Beck says.

“He’s never afraid to try something new, especially if he thinks that it will engage his students and help them develop as scientists.”

CHRISTOPHER BECK, PH.D.
EMORY UNIVERSITY



"Larry is an ecologist by training, and SEA-PHAGES is mostly molecular biology and computational biology," Beck explains. "But he jumped right in. Larry learned a lot, and so did his students."

The two researchers' most recent NSF-funded project, the Bean Beetle Microbiome Project, has also posed some unique challenges. The project was designed to engage students in studying the beetles' microbial communities, so Blumer and Beck have both been learning microbiology, molecular biology and bioinformatics in the process.

Such projects, Blumer feels, are exciting and rewarding. "The current grant involves working with other faculty, and one of the

FACULTY FOCUS

pleasures for me is being able to train other faculty,” Blumer says.

In the five-year project with bean beetles (a collaboration with Sinead Younge, Ph.D., at Morehouse and Nicole Girardo, Ph.D., at Emory), the researchers are holding faculty development workshops—workshops that train faculty how to do course-based undergraduate research, and then asking them to go back and implement it, twice.

“We want them to implement the protocols in two different classes,” Blumer says. “One gives the students a maximum amount of autonomy, but guides the students; in another one, the faculty member decides what the research question is.”

Along with training faculty, Blumer is also passionate about teaching the men of Morehouse, where he’s been a member of the faculty for 30 years. “I like being able to combine teaching and research,” he explains. “The career I’ve created is one where I really want to do research that is directly involved in how I teach.

“The work I’m doing on bean beetles right now isn’t just about the beetles,” he notes. “It’s also a study about how we improve learning and teaching.”

Blumer’s current work is based on a teaching method that uses the acronym CURE (Course-based Undergraduate Research Experience), and is based on teaching students how to do science by having them work like scientists. The research will assess the importance of student autonomy.

“We give them some content and tools, we have them read past studies, and then we ask them to propose some new questions,” he explains. “We discuss potential questions with them, decide on a given question that is doable, and then have them design and conduct the experiment.

“What makes it different is that for it to be really useful to them and us, the question has to be something that’s new. It’s exciting not knowing what’s going to happen.”



The Bean Beetle Microbiome Project was designed to engage students in studying the beetles’ microbial communities, so Blumer and his colleague have been learning microbiology, molecular biology and bioinformatics.



A member of the Morehouse faculty for 30 years, Blumer enjoys being able to combine teaching and research. “The career I’ve created is one where I really want to do research that is directly involved in how I teach.”

This current research has been consuming, says Blumer, who is also busy now with virtual teaching at Morehouse. But the Georgia scientist makes time for his other interests. He’s an active family man, an amateur photographer specializing in landscapes, and a woodworking hobbyist, making small items, such as pens, bottle stoppers and duck calls, as well as some furniture. He’s also been interested in theater, particularly Shakespeare, since growing up in Michigan.

“In high school, I was very keen on Shakespeare, and there’s a Shakespeare festival (the Stratford Festival) nearby

in Stratford, Ontario. Between Detroit and Windsor, Ontario, is a bridge and a tunnel, and back then, you could cross with just your driver’s license.”

Blumer plans to remain on the faculty at Morehouse College, where he came to teach environmental biology in 1990, for several more years. Still, he says, he’s getting close to the end of his career at Morehouse, a place that’s offered him many opportunities over the years.

“I’ve had opportunities at Morehouse that I never would have had at Michigan because it’s a small liberal arts college and because it’s an HBCU,” he explains. “There’s more opportunity to play a larger role because fewer people are involved.

“I teach classes of 30 students, and I know all of them.”

Students and their achievements, are, in fact, the thing that Blumer feels proudest of, looking back on his career.

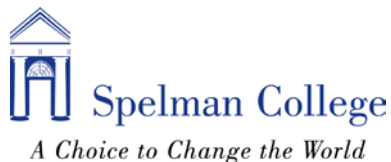
“I’m really proud of what my students have done—the students I have worked with. And of helping to move the ball forward in what we consider to be best teaching practices,” he reflects.

“A good number of Morehouse students go on to do fabulous things, and to play a small role in that is really exhilarating.” ■

Lawrence S. Blumer
 Professor of Biology
 Division of Life Sciences
 Morehouse College
 830 Westview Drive SW
 Atlanta, Georgia 30314
 P: 470.639.0283

lawrence.blumer@morehouse.edu

HBCU SCHOLAR SPOTLIGHT



Talese Simley Acquires College Degree, New Confidence From Spelman, NAVY ROTC



Talese Simley, a first-generation college student, held off buying a Spelman College t-shirt until her junior year because she wasn't sure she'd make it to graduation. But Simley did earn that degree in 2020. And, along the way, she was named to Spelman's selective Women in Excellence leadership group, produced an award-winning senior thesis, and had her first paper published—a scholarly work about teaching coding to middle-school students.

She also went from being a Navy ROTC midshipman, at Spelman, to an ensign. The accomplished young woman from Tacoma, Wash., is proof that having determination, a good work ethic, and the courage to seek help when it's needed go a long way toward success in any field.

Simley is now living in Norfolk, Va., waiting to attend U.S. Navy training school. She shared some of her experiences, and advice, before shipping out to Spain on the USS Bulkeley this December.

What advice would you give to first-generation college students, or those with challenging majors?

"I would tell them that 'not knowing' is OK. It took me a long time to ask for help. Like not understanding the lesson in class, or the homework. It's OK to not know, and ask. I got help from anybody who would listen to me—all my professors. I was always in their offices asking questions.

"And don't say no to an opportunity because you think you're not good enough or it's not where you think you belong in your life. If I had said no to the cyber security program, based at Morehouse, that I was involved with, I would not have met so many great people. I would not have been in the program I am now and not had my first paper published."

Tell us about that student cyber security program.

"I never took a computer science class. I learned through a program that the Department of Defense made to get ROTC students actively aware of cyber security."

“

My confidence was so low, and Spelman was so hard. I don't even know how I made it. But I thank God for even putting Spelman in my path. It's one of those things you don't even know you need till you've got it.”

—TALESE SIMLEY

Why did you choose the Navy? What will you be doing?

"I'd wanted to join the Navy since I was 10 or 11. I've always lived around water—Tacoma and then Alexandria, Virginia. I'll be the communications officer on my ship, working with sonar techs and doing anti-sub warfare. I don't know exactly what I'll be doing but I'm excited. One of the best ways to learn something is going in with no knowledge and soaking stuff in—learning things from the foundation up."

Did you always plan to go to college?

"No. When I started high school in Henry County, Georgia, I joined Navy JROTC. The instructors were retired Navy personnel, and they treated me like a daughter; if I was doing badly in a class, they weren't intrusive but involved. I liked the Navy so much that I thought I would just enlist. But my ROTC instructors pushed me to take the ACT and SAT, and apply for a national scholarship. Then they said if you applied to an HBCU, your chances of getting a scholarship were higher. Spelman was the only HBCU with biochemistry—what I wanted to major in then—so I applied and got in."

HBCU Scholar Spotlight... cont'd

You excelled in high school, so was it an easy transition?

"No. My confidence was so low, and Spelman was so hard. I don't even know how I made it. But I thank God for even putting Spelman in my path. It's one of those things you don't even know you need till you've got it."

You ended up changing your major at Spelman?

"I started as a biochemistry major, but I took a sociology class and fell in love with it. The Navy ended up approving my major change."

How did you happen to do STEM community service work at Spelman, when you were teaching coding to youngsters?

"Spelman has a service requirement every semester. The college had a community service fair, and I decided to sign up at this elementary school in Atlanta and ended up loving it; I started mentoring and I volunteered at that school for the whole four years."

You wrote a published paper based on your coding work with children. Was it with that elementary school-age group?

"No, I did it with middle-schoolers. Coding workshops are usually more targeted to kids getting ready to go to college, or elementary-schoolers. But kids 10-12 are kind of left out. And in research you want to look at stuff others aren't looking at."

Tell us about your published paper.

"The title of the paper is 'Assessing the Efficacy of Integrating Computer Science, Math, and Science in a Middle School Sphero Robotics Summer Program.' It was part of a summer workshop that the CRCL ran. (The Atlanta University Center's Culturally Relevant Computer Lab.) The actual camp was centered on



Simley went from being a Navy ROTC midshipman, at Spelman, to an ensign. She's proof that having determination, a good work ethic, and the courage to seek help when it's needed go a long way toward success in any field.

the arts and sciences, and students got to choose two classes they wanted to attend for the summer.

"The goal of the workshop was to expose the students—rising sixth-graders to rising eighth-graders—to the world of coding, while integrating relevant science and math concepts. My paper outlined the following:

- What lesson planning looked like.
- Why we chose Sphero and other workshops/courses similar to ours, and their results.
- The importance of targeting middle-school students.
- The results of the lab's own workshop/ the next steps.
- The importance of outreach programs.

"The paper was presented as a research paper at RESPECT 2020 (Research on Equity & Sustained Participation in Engineering, Computing & Technology). It was an observation of how students' minds work. Basically, we were watching them learn and asking, 'What is going on in their minds when people try to teach them to code? And what brings results and what doesn't?'

"I worked with Dr. Kinnis Gosha (the Hortinius I. Chenault Endowed Division Chair for Experiential Learning & Interdisciplinary Studies at Morehouse College, and director of the CRCL). I wrote the paper, but there was a whole team behind me that helped and guided me the entire time."

How important do you think mentors are for students?

"I think it's imperative. At any and every stage of your career, including while you're in school. I don't think I would be where I am without the wisdom and encouragement of my own mentors. Though I haven't had much face time with Dr. Gosha, I have had the pleasure of being mentored by Naja Mack, the director of the CSCoRE program (Cyber Spectrum Collaborative Research Environment). She's played a major role in my development as a coder, and strengthened my love for outreach. Dr. Cynthia Spence at Spelman is the one that introduced me to sociology, and she helped me matriculate through Spelman. She continues to be my inspiration to always see where I can make a difference." Spence is an associate professor of sociology and director of Spelman's Social Justice Fellows Program.

What's next for you?

"I hope to pursue my Ph.D., but I'm actually going to take a break and just be present in my Naval career. If an opportunity to go to graduate school presents itself, without jeopardizing my career progression, then I will take that. I still do not know what I would get my master's in and I'm OK with that. When the time is right, I will know everything I need to know. For now, I will just enjoy the present."

Do you have any parting words of advice for students?

"Work hard. When you really want something, you'll work for it." ■

Philanthropist MacKenzie Scott Gives Millions to HCBUs

“My approach to philanthropy will continue to be thoughtful. It will take time and effort and care. But I won’t wait. And I will keep at it until the safe is empty.”



Author and philanthropist MacKenzie Scott has donated almost \$1.7 billion to more than 100 nonprofit entities driving positive change in this country, including six Historically Black Colleges and Universities (HBCUs).

Hampton University, Howard University, Morehouse College, Spelman College, Tuskegee University, and Xavier University of Louisiana all received donations—much of which will go to STEM-related needs.

The billionaire ex-wife of Amazon co-founder Jeff Bezos, said her donation was to support institutions doing transformative work. Scott chose the recipients after receiving suggestions from advisors about “historically marginalized race, gender, and sexual identity groups.”

Overall, 116 organizations received generous donations.

HAMPTON UNIVERSITY reported receiving \$30 million from Scott. The funds may be used for: support for technological advances and upgrades to scientific laboratories; the Hampton University Proton Therapy Institute; and new student scholarships.

HOWARD UNIVERSITY officials announced that the university had received \$40 million from Scott. The gift is expected to be used to meet needs for: additional support for one of Howard’s signature retention programs, the Graduation & Retention Access to Continued Excellence (GRACE) Grant; a program focused on social innovation and entrepreneurship; ongoing campus infrastructure improvement projects; and a new faculty development plan to provide additional educational development and professional advancement opportunities.

MOREHOUSE COLLEGE received a \$20-million gift from Scott. “This gift will help Morehouse to lay the foundation for the campus of the 21st century and continue the important work

we do to produce graduates who effect positive change,” said President David A. Thomas. Thomas added that the gift would help Morehouse “to build capacity and invest in strategic academic programs to enrich the experiences of the men of Morehouse.”

SPELMAN COLLEGE also received a \$20-million gift. The college will allocate funds toward development of the strategic plan “designed to educate global leaders who graduate from Spelman with a competitive edge, prepared to become successful innovators and change agents,” said Mary Schmidt Campbell, president.

TUSKEGEE UNIVERSITY received a \$20-million gift. President Lily D. McNair said she envisions the gift being used to support four broad areas at Tuskegee: increasing student access; strengthening signature programs; advancing research and innovation; and preserving the university’s legacy.

XAVIER UNIVERSITY OF LOUISIANA, the only Catholic HBCU in the nation, also received a gift. President Reynold Verret said the donation “will enhance the university’s capacity to educate in the medical sciences, pharmacy, law, the arts, and the social sciences. This is a remarkable demonstration of support and encouragement for Xavier and its mission, and a reminder that what we do is important—not only at the university, but also within our global community.”

In Scott’s pledge letter when making the donations, she wrote: “We each come by the gifts we have to offer by an infinite series of influences and lucky breaks we can never fully understand. In addition to whatever assets life has nurtured in me, I have a disproportionate amount of money to share.

“My approach to philanthropy will continue to be thoughtful,” she added. “It will take time and effort and care. But I won’t wait. And I will keep at it until the safe is empty.” ■



BLACK ENGINEER OF THE YEAR AWARDS CONFERENCE SET IN 2021!

The 35th annual Black Engineer of the Year Awards (BEYA) Conference has been scheduled for Feb. 11-13, 2021, in Washington, D.C. The conference theme is: Becoming Everything You Are.

Students are invited to attend the conference career fair to meet top employers, take advantage of onsite resources, and gather tools to help build a successful STEM career. Professionals can expect to find training and networking opportunities, role models, mentors, and awards events.

"The conference's prestigious awards continue to provide employers with the opportunity to share the achievements of minorities in STEM," according to US Black Engineer & Information Technology magazine.

For more conference information, [click here](#).



Lt. Gen. Bruce T. Crawford serves as the principal advisor to the Secretary of the Army.

LT. GEN. BRUCE T. CRAWFORD NAMED 2020 Black Engineer of the Year

Lt. Gen. Bruce T. Crawford, principal advisor to the Secretary of the Army, has been named the 2020 recipient of the Black Engineer of the Year Award.



A South Carolina native, Crawford was sworn in as the U.S. Army Chief Information Officer in 2017. He helps to set strategic direction and objectives for the Army network, and supervises all Army C4 (command, control, communications, and computers) and Information Technology (IT) functions. He also advises the Chief of Staff of the Army on communications, signal operations, cybersecurity, force structure, and equipping.

Crawford was named Black Engineer of the Year for his efforts to mentor the next generation of American scientists, technologists, and engineers. He was commissioned through the South Carolina State University's Reserve Officer Training Corps program on May 28, 1986, after graduating as a Distinguished Military Graduate with a bachelor of science degree in electrical engineering. Crawford also holds a master of science in administration degree from Central Michigan University, and a master of science in national resource strategy from the Industrial College of the Armed Forces.

The three-star Army general became the third active-duty officer to win the Black Engineer of the Year Award after retired Capt. Donnie Cochran (1989) and retired Lt. Gen. Joe N. Ballard (1998). ■

A listing of past award recipients is on page 15.

HBCUs Grapple With Reopening Amid COVID-19

In-person or online, HBCUs have found ways to keep learning alive.

The Centers for Disease Control and Prevention (CDC) offered guidelines to U.S. colleges and universities last summer to help them prepare for fall classes under the threat of COVID-19. Some went virtual, others opened fully for this quarter/semester, and a few developed hybrid models.

Since last spring, many HBCUs have used emergency funds to support students who were not able to return home and were left without any means of financial support, according to the United Negro College Fund (UNCF). Some schools have provided meal delivery for students in need, and accommodated those without access to computers or internet services, so that those students can continue their studies. Recognizing the personal toll of COVID-19—anxiety, sadness, confusion, isolation, fear—other schools have offered emotional support.

“As the COVID-19 crisis continues, HBCUs are working diligently to safeguard the health of their students, faculty and staff,” said UNCF officials. “Each HBCU continues to do the best they can to adjust to the multitude of challenges created by COVID-19, and help students and staff balance health and academic goals during this time.”

Here’s what some HBCUs have been doing this fall during the continuing pandemic.



ALABAMA A&M UNIVERSITY

In June, the Board of Trustees at Alabama A&M announced plans for students to return in the fall. Classes began in August under a hybrid instructional model that includes both in-class and online course offerings. Some students are living on campus, and AAMU is participating in a program that provides free COVID-19 testing. Anyone testing positive is asked to isolate until a negative test is received.



HBCU REOPENINGS... cont'd



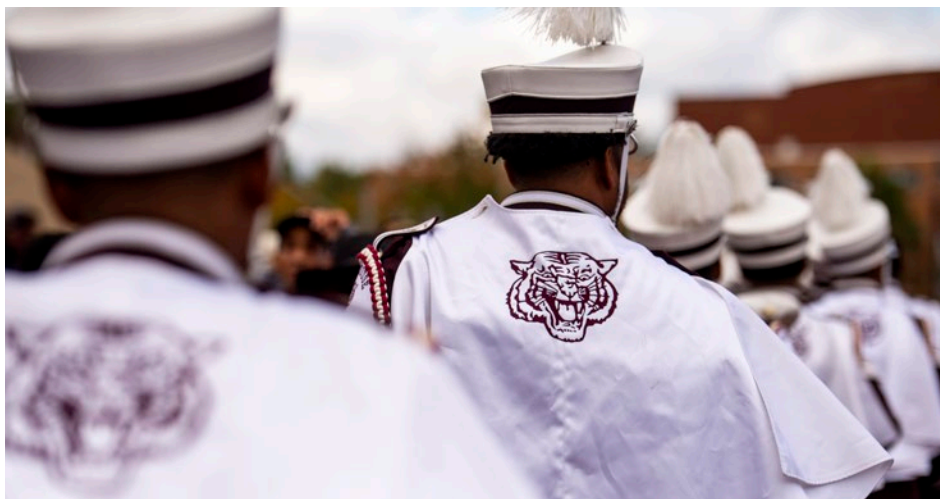
FLORIDA A&M

Employees and students began returning to the university June 15, in phases. For fall, Florida A&M is employing "a hybrid approach" to academics, and, as of Aug. 27, more than 1,300 students were reportedly living in residence halls at Florida A&M. "Things went smoothly," said Housing Office Director Jennifer Wilder. "The students arrived and we are working with them to keep everyone safe and healthy." The university has taken many precautions, and faculty, staff, and students participated in a COVID-19 training and education program before returning to campus.



HAMPTON UNIVERSITY

After first planning for in-person fall classes, Hampton reversed its decision "out of an abundance of caution for the health, safety and welfare of our students as well as the faculty, administrative staff, administrators, maintenance and custodial staff, and others with whom students might interact," said Hampton University President William R. Harvey. The university is offering only remote classes this fall as part of its Fall 2020 Virtual Experience. "If conditions permit, we anticipate reopening the campus for in-person instruction in the spring of 2021," Harvey said.



Morehouse had plans to reopen this fall but ultimately college officials decided "with bitter disappointment" to go virtual with all classes, said President David Thomas. "If conditions permit, we will reopen the campus for in-person instruction for the Spring 2021 Semester."



HOWARD UNIVERSITY

For the fall 2020 semester, Howard's undergraduate classes are fully online, and the campus is mostly non-residential. "As the university plans for the Fall 2020 semester, we are doing so with the awareness that we are not only amidst a public health pandemic, but we also face growing social unrest nationwide that is influencing our academic planning," said Howard President Wayne Frederick. "Howard University continues to monitor the (COVID-19) pandemic and is doing our part to help flatten the curve of the rate of infection, while maintaining services required to deliver an exceptional education to our students, and conduct critical research in the safest manner possible."



MORGAN STATE UNIVERSITY

Morgan State shifted to remote-only instruction for the fall semester. "The university's Board of Regents convened a special meeting to evaluate the feasibility of reopening in light of the inherent challenges of managing the health and safety of the campus community and the financial impact of altering the current direction, before ultimately deciding to support the university leadership's appeal for all instruction to be conducted remotely," a statement read.

HBCU REOPENINGS... cont'd



MOREHOUSE COLLEGE

Morehouse had plans to reopen this fall but ultimately college officials decided “with bitter disappointment” to go virtual with all classes. “Members of the Morehouse Emergency Management Team have become increasingly concerned about the growing number of Americans affected by this deadly disease,” President David A. Thomas wrote in a letter to the college community. “The Centers for Disease Control, for example, has reported a rapid rise of COVID-19 cases in states that are home to many of our men of Morehouse: California, Florida, Georgia, Pennsylvania, South Carolina, and Texas. Since those numbers are expected to continue rising, we have decided to delay reopening. If conditions permit, we will reopen the campus for in-person instruction for the Spring 2021 Semester.”



SPELMAN COLLEGE

Spelman’s campus remains closed for the fall semester, and classes are virtual. “It pains me deeply now to deliver the news that in the past two weeks, the health crisis has worsened considerably in the state of Georgia, the city of Atlanta, and in Fulton County, in which Spelman and the Atlanta University Center are located,” President Mary Schmidt Campbell wrote students in late summer. “Because of the worsening health crisis, we have reluctantly come to the realization that we can no longer safely sustain a residential campus and in-person instruction. With a sense of great disappointment, I now share with you our decision that all instruction for the fall of 2020 at Spelman will be virtual.” College officials planned various virtual information sessions and events throughout the year to connect with current and prospective students.



SHAW UNIVERSITY

The faculty and some 1,250 students returned to Shaw in early August, and are taking precautions outlined in a COVID safety guideline book. (Only half that number of students are living on campus.) Fall Break was eliminated, as is the case at many schools, and the semester will end with Thanksgiving. “This is a safe haven for some of our students,” said Robin Featherstone, Shaw’s director of student activities, leadership and Greek life. “Our community is vulnerable and some students here know that they are in a safe place—in a (private) room where they can get up and go eat when they need to.”



NORFOLK STATE UNIVERSITY



Learning is diverse at Norfolk State this fall. “We will continue with our plan to have those of you who will be on campus return in the coming weeks,” NSU President Dr. Javaune Adams-Gaston said in late summer. Classes began virtually Wednesday, Aug. 26. This means that all classes from Aug. 26 to Sept. 7 were remote or online. Since Sept. 8, classes have continued in the original formats: in-person, hybrid, remote, or online. Everyone on campus is required to wear masks, wash hands, social distance themselves, and take other precautions.



SAINT AUGUSTINE'S UNIVERSITY
Transform. Excel. Lead.



SAINT AUGUSTINE'S UNIVERSITY

Saint Augustine’s welcomed students back to campus in August. Move-in crews came armed with hand sanitizer and mask detection software at some campus building entrances. “In this new normal, I encourage you to make judicious decisions,” SAU President Irving P. McPhail told students in a message posted to social media. ■



VIRGINIA STATE UNIVERSITY



VSU had planned a phased approach to reopening but the university is no longer allowing students to return to campus for classes in September. Makola M. Abdullah, president of the historically Black university in Petersburg, announced the decision in a message to the campus community in August. Instead, the school is having a fully virtual start to the academic year after watching campuses reopen and then have to close due to coronavirus outbreaks, according to officials.

NEWS YOU CAN USE

BRIEFS

Howard Gets \$10 Million for STEM Scholars Program



Howard University has received a \$10-million gift from the Karsh Family Foundation to endow its STEM Scholars Program, which provides scholarships (covering all tuition and fees) for some 30 students each year. The program, formerly known as the Bison STEM Scholars Program and renamed the Karsh STEM Scholars Program after the historic gift, was founded in 2017 to diversify STEM professions and “increase the number of underrepresented minorities earning a Ph.D. or combined M.D./Ph.D. in a STEM discipline.”

Howard President Wayne A.I. Frederick said the new gift, which follows a \$4-million donation to the program made earlier, is reflective of the program’s early success. “We were able to attract highly qualified students who can actually get into any major university in the country ... but thought the idea of pursuing a degree in STEM with compatriots who look like them and had similar lived experiences would be attractive.”

Olin College President Welcomed With Car Parade



The Olin College of Engineering community held a car parade in July to welcome the new college president in a safe, socially distanced way. Dr. Gilda A. Barabino

became Olin’s second college president on July 1. She’s also a professor of biomedical and chemical engineering.

Barabino was previously dean of the Grove School of Engineering at the City College of New York, associate chair for graduate studies and professor in the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory University, inaugural vice provost for academic diversity at Georgia Tech, and a professor of chemical engineering and vice provost for undergraduate education at Northeastern University.

She is listed in US Black Engineer magazine as a leading educator, and is a well-known researcher in the fields of cellular and tissue engineering and sickle cell disease.

Morehouse Bootcamp Helps Workers Displaced by COVID-19

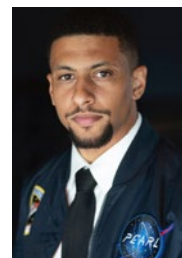
MOMENTUM @ MOREHOUSE

Morehouse College’s first coding certificate bootcamp, Momentum@Morehouse—a 12-week, hands-on, continuing education program created in partnership with Opportunity Hub and Momentum Learning—was launched online on May 26.

The bootcamp was designed to help career-starters, skill-seekers, and workers downsized during the global pandemic learn how to thrive as software developers. Momentum@Morehouse was also open to anyone nationwide wanting to gain new programming skills or change careers.

Seven of the top 10 jobs on Glassdoor’s “Best Jobs in America in 2020” list are in tech, with salaries ranging from \$84,000 to \$107,000. African Americans, however, are underrepresented in tech, the field ranked nationally as having among the highest starting salaries and the most opportunity for future growth, said Dr. Kinnis Gosha, Morehouse division chair and the Hortenius I. Chenault Endowed Associate Professor for Experiential Learning and Interdisciplinary Studies. “Momentum@Morehouse recognizes this missed opportunity and is dedicated to bringing much-needed diversity to the computing landscape.”

Hampton U.’s Justin Shaifer is Rising STEM Star



Justin Shaifer

Hampton University alumnus Justin Shaifer has been named to the HBCU Buzz Top 30 Under 30 list, which honors the achievements of alumni from Historically Black Colleges and Universities.

A rising star in STEM education and advocacy, Shaifer has a goal—“to be for STEM what ESPN is for sports.” He is the founder and executive director of Fascinate Inc., a nonprofit partnering with organizations such as Microsoft and Google to spark students’ interest in STEM careers. Shaifer is also a science education doctoral student at Teachers College, Columbia University, and host of WGBH’s live science show, “Escape Lab.”



Hampton University alumnus Justin Shaifer is a rising star in STEM education and advocacy.

He is known for his TEDx talk, “How to Speak Generation Z,” and the Magic Cool Bus Project, which Shaifer describes as a mobile museum and STEM program that travels to schools in minority neighborhoods, offering guided instructional play with 3D printers, drones and other gadgets. Shaifer’s work has also been featured in Forbes, Variety, and other media outlets.

For more on the rising STEM star, [click here](#).

HBCU Buzz produced the first HBCU Top 30 list in 2014 as a way to recognize the achievements of men and women who have studied at HBCUs. View the full list [here](#).

NEWS YOU CAN USE BRIEFS... cont'd



Tiffany Alfred

Hampton University Student Wins Morgan Award

Hampton University PharmD student Tiffany Alfred is the 2020 recipient of the competitive Harvey B.

Morgan Award for Advancing Health Policy. Alfred has a bachelor's degree in chemistry from Norfolk State University.

The Morgan Award, given on behalf of the Virginia Pharmacists Association, recognizes a future pharmacist who demonstrates service, activity, and commitment in professional policy development and advocacy for improved healthcare. The award comes with a \$1,000 check, a plaque, and a stipend for registration to attend the VPhA Annual meeting.

Alfred is scheduled to receive her degree from Hampton's School of Pharmacy in May 2021.

Alabama A&M Selected to Host NASA Space Apps Challenge



Alabama A&M University was selected to virtually host the 2020 NASA Space Apps Challenge-Greater Huntsville Region Oct. 2-4, 2020.

Space Apps Challenge is an annual international hackathon led by NASA officials in collaboration with universities, schools, and industries. The event is organized for coders, scientists, designers, storytellers, makers, builders, technologists, entrepreneurs, and others in cities around the world.

This year's theme was "Take Action," a critical reminder to participants that they can make a difference, even from the comfort and safety of their homes. High school, undergraduate, and graduate students were welcome to participate, forming teams and engaging with NASA's free and open data to address real-world problems on Earth and in space.

The 2019 Space Apps Challenge included more than 29,000 participants at 225 events in 71 countries.



Howard's Quantum Lab Awarded Guy Foundation Grant



Howard University's Quantum Biology Laboratory (QBL) has received a

\$550,000 grant from the Guy Foundation to support the lab in exploring "fundamental questions at the nexus of quantum theory, electrostatics, and biosystems," according to the university. Grant money for the project, under the direction of Dr. Philip Kurian, QBL principal investigator and founding director, must be used over the next two years.

"This is a landmark moment for the QBL, and for Howard," said Kurian, a theoretical physicist. "It demonstrates our university's institutional commitment to research in the quantum sciences, particularly quantum biology."



Dr. Philip Kurian

This is the first time the United Kingdom-based foundation has awarded a grant to an institution outside the UK, and the third scientific research project supported by the Guy Foundation since it was established in 2018.



Howard University STEM students

AWARDS/GRANTS

Four Receive NSF Noyce Teacher Awards



Dr. Qingxia Li



Dr. Marcia Millet



Dr. Camille Burnett



Dr. Laurette Foster

Dr. Qingxia Li and Dr. Marcia Millet, both affiliated with Fisk University in Nashville, and Dr. Camille Burnett and Dr. Laurette Foster, with Prairie View A&M University in Texas, have each been awarded a one-year, NSF Noyce Teacher Award for \$75,000. After one year, recipients can submit proposals to compete for multi-year, increased funding grants.

The Robert Noyce Teacher Scholarship Program provides funding to institutions of higher education for scholarships, stipends, and programmatic support to recruit and prepare STEM majors and professionals to become K-12 teachers.

NSF-funded Project to be Implemented at QEM

Dr. Ivory Toldson (principal investigator) and colleague, Dr. Mercy Mugo (co-principal investigator), have received an NSF project award of \$99,855 for "Transdisciplinary Convergence to Accelerate Strategies to Mitigate Institutional Racism in Criminal Justice, Education, and Health

NEWS YOU CAN USE AWARDS/GRANTS... cont'd

Systems." The project had a start date of Sept. 1, 2020.

The NSF-funded project is being implemented at the Quality Education for Minorities (QEM) Network Office in Washington, D.C. Toldson is the president and CEO of QEM in Washington. He works as a professor of counseling psychology at Howard University, and serves as editor-in-chief of *The Journal of Negro Education*.



Dr. Ivory Toldson



Dr. Mercy Mugo



For more about QEM,
[click here.](#)

Bowie State's Gillette Awarded Two NSF Research Grants



Dr. Devyn Gillette

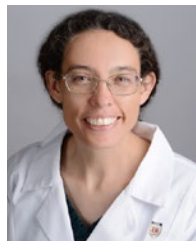
Dr. Devyn Gillette, an assistant professor of biology at Bowie State University in Maryland, was recently awarded two NSF grants: a DUE/DHR Robert Noyce Scholarship Program Award for \$667,904

entitled "Preparing and Retaining Diverse, High-Quality Secondary School STEM Teachers in Maryland High-Need Schools," (co-principal investigator); and an HRD/DHR HBCU-UP Research Initiation Award entitled "The Characterization of IL-60 on Cystic Fibrosis Airway Epithelial Cells Membrane Integrity and Bacterial Clearance," for \$299,926 (principal investigator).

Gillette's research goal is "to elucidate how the host intracellular signaling molecules within airway epithelial cells contribute to inflammatory responses during challenge with bacteria/bacterial products."



Lane College's Van Stry Receives NSF Award



Dr. Melanie Van Stry

Dr. Melanie Van Stry, division chair in the natural and physical sciences at Lane College, along with her co-principal investigators, have been given a \$816,766 National Science Foundation Award.

The award is for "Implementation Project: Improving Minority Student Persistence in STEM Fields Through Active-learning, Peer-mentoring, Undergraduate Research and Community Outreach."

Co-principal investigators are Dr. Candace Jones, Dr. Aminah Farrakhan-Gooch, and Dr. Peter McCarthy.



Winston-Salem State's Deb Awarded \$1,498,626



Dr. Debzani Deb

Dr. Debzani Deb of the computer science department at Winston-Salem State University has been awarded \$1,498,626 for a three-year project funded by the UNC Research Opportunities Initiative. Deb is an

associate professor and founding director of the Center for Applied Data Sciences, an institution-wide initiative with the goal of fostering research and education in data-driven knowledge discovery.

The center supports five WSSU Faculty Fellows and their research initiatives as well as one post-doctoral researcher, five graduate students, and eight undergraduate student researchers.



Dr. Grant Wangila Gets NSF Project Award of \$399,948



Dr. Grant Wangila

Dr. Grant Wangila, principal Investigator, along with co-principal investigators Dr. Richard Walker, Dr. Joseph Onyilagha, and Dr. Abul Kazi have received an NSF project award of \$399,948 for the

"Targeted Infusion Project: Infusion of Computer Technology into General and Organic Chemistry."

Wangila is chair of the Department of Chemistry and Physics at the University of Arkansas at Pine Bluff. The project had a start date of Aug. 15, 2020. ■

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Mark A. Melton, Ph.D.
Professor of Biology
Dean, School of Sciences,
Mathematics & Public Health
Saint Augustine's University
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Raleigh, NC 27610
(919) 516-4029
mamelton@st-aug.edu

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2020 BLACK ENGINEER OF THE YEAR AWARD... cont'd

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John Brooks Slaughter, 1987

Chancellor,
University of Maryland

Erroll B. Davis, 1988

President,
Wisconsin Power & Light Co.

Donnie Cochran, 1989

U.S. Lt. Cdr.,
Blue Angels

Arlington W. Carter, 1990

VP/General Manager,
Missile Systems Division, Boeing

Guion "Guy" Stewart Bluford, 1991

NASA Astronaut

Arnold F. Stancell, 1992

Professor of Chemical Engineering,
Georgia Tech

James W. Mitchell, 1993

Analytical Chemistry Research,
Bell Laboratories

William R. Wiley, 1994

Principal Executive,
Battelle Memorial Institute

Walt W. Braithwaite, 1995

VP, Information Systems,
Boeing Commercial Airplanes group

Albert J. Edmonds, 1996

Director,
Defense Information Systems Agency

Arthur Johnson, 1997

Corporate VP,
Lockheed Martin Corp.

Joe N. Ballard, 1998

Commander,
U.S. Army Corps of Engineers

Paul Caldwell, 1999

Chairman and General Manager,
Mobil Producing, Nigeria

Mark E. Dean, 2000

Director,
IBM Research Laboratory

Shirley Ann Jackson, 2001

President/CEO,
Rensselaer Polytechnic Institute

Rodney O'Neal, 2002

Executive VP,
Delphi Automotive Systems

Lydia Thomas, 2003

President/CEO,
Mitretek Systems

Anthony James, 2004

President/CEO,
Savannah Electric

William D. Smith, 2005

President,
Parsons Brinckerhoff Quade & Douglas

Linda C. Gooden, 2006

President,
Lockheed Martin Information Technology

Rodney C. Adkins, 2007

VP, Development, IBM

Reginald Van Lee, 2008

Senior VP, Booz Allen Hamilton

Wanda M. Austin, 2009

President/CEO, The Aerospace Corp.

John D. Harris, 2010

VP, Contracts and Supply Chain, Raytheon

Lloyd Howell, 2011

Executive VP, Booz Allen Hamilton

David L. Steward, 2012

Board Chairman, World Wide Technology Inc.

Freeman A. Hrabowski, 2013

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Solutions, Lockheed Martin

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Eugene DeLoatch, 2017

Dean Emeritus,
Morgan State U., School of Engineering

Alicia Boler Davis, 2018

Executive VP,
Global Manufacturing, General Motors

Anthony Mitchell, 2019

Executive Vice President,
Booz Allen Hamilton

Lt. General Bruce T. Crawford, 2020

U.S. Army Chief Information Officer (CIO)/G-6

HBCU STEM Undergraduate Success (STEM-US) Research Center

PROJECT TEAM MEMBERS



Lycurgus L. Muldrow, Ph.D.
STEM-US Executive Director
Morehouse College



Michael Hodge, Ph.D.
Provost and Senior Vice
President for Academic Affairs
Morehouse College



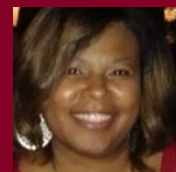
Kinnis Gosha, Ph.D.
Division Chair of
Experiential Learning and
Interdisciplinary Studies
Morehouse College



Lawrence Blumer, Ph.D.
Professor of Biology
Morehouse College



Cheryl Talley, Ph.D.
Associate Professor of
Neuroscience
Virginia State University



Shondrieka N. Lamb, M.S.
STEM-US Assistant Director
Morehouse College



Danielle Dickens, Ph.D.
Assistant Professor
Spelman College



The HBCU STEM Undergraduate Success Research Center (STEM-US) at Morehouse College studies how the formation of scientific identity in HBCU students builds confidence and motivates them to graduate and succeed with science, technology, engineering, and mathematics degrees. The STEM-US Research Center also aims to disseminate information that impacts mainstream education reform in STEM areas and promote the academic value of an HBCU education. STEM-US is supported by a National Science Foundation (NSF)-HBCU Undergraduate Program (HBCU-UP) Broadening Participation Research Center grant, number 1818458.