How the dean of the School of Information Sciences hopes to redefine libraries in the age of the internet
Letter from the President

Several years ago I had the opportunity to address the country’s alarmingly low number of African American males in medicine before a national audience of medical professionals. This conversation is as relevant today as it was then.

Despite many advancements in the field, the number of black men applying for medical school has not surpassed the level it was at 40 years ago when I was a med student. No other major demographic group has experienced this lack of progress in the field. This is particularly concerning since we know that diversity and inclusion are drivers of excellence in medical school and in the greater medical community. And without the participation of black men, it’s hard to imagine accelerating advancements in health disparities research.

Despite our urban Detroit location, Wayne State University is not immune to this challenge. In 2014, our School of Medicine enrolled only three students from groups that are “underrepresented in medicine” (URMs) through the regular admission process — the lowest number in its history. We realized that this crisis needed to be addressed and began an aggressive campaign to counter the decline. The School of Medicine made significant changes to its admissions procedures, leading to major improvements. In 2019, we enrolled 69 URMs. This is an amazing turnaround, but there is much yet to do.

This is why Wayne State University continues to deepen its commitment to fostering diversity not only in medicine but across all fields related to science, technology, engineering and math. In this issue of Warriors, we look at some of the steps that the university has taken, on its own and with our allies in the community, to provide a bridge to STEM careers for young people in and around Detroit.

From youth-focused programs such as SMASH and STEM Day to the individual efforts of administrators, faculty and others in our community, Wayne State is a hub of STEM education, for both our students and future Warriors.

One such initiative is the Wayne Med-Direct program. It guarantees undergraduate admission and eventual admission to the School of Medicine for 10 exceptional high school seniors each year. Preference is given to students from disadvantaged socioeconomic backgrounds who are interested in studying health disparities. Much like recruiting an athlete, we encourage the best students whose ambitions are immune to this challenge.

As the publication devoted to covering Wayne State’s community involvement, we encourage readers to share stories about the work the university does in and around Detroit.

Got an idea for Warriors magazine? Contact us at engaged@wayne.edu.

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We seek to reflect that commitment not only in our institution, but also in the men and women who comprise our administration, faculty and staff — and, of course, in our students.

In this issue, we see that passion for engagement and educational equity in the vision of Dean Jon E. Cavthorne, the head of our School of Information Sciences, who has taken on the monumental task of transforming our library system in the midst of the Information Age. We hear that determination in the words of Billicia Hines, the director of Wayne State’s Black Theatre and Dance Collective. We see the outcomes of that work in the accomplishments of small businesses like Detroit Dough and neighborhood-based nonprofits like Detroit Hives, which are run by former WSU students who are deeply devoted to their crafts as to their communities.

We hope you’re as inspired by their stories as we are.

Sincerely,

President M. Roy Wilson

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Tonya Matthews, Ph.D.
steps into STEM leadership role

“Experience at the Michigan Science Center was a fantastic introduction to Detroit and STEM,” she said. “It was also how I met Wayne State, which has always been a strong community partner of the Science Center.”

Having grown up in Washington, D.C., Matthews is the oldest of four children. Her mother was a high school English teacher who later went into higher education, and her father was a police officer with a particular fondness for math. It seemed inevitable that she would pursue lifelong learning.

“My parents were bound and determined that their kids would go to good schools,” Matthews said. “They established a family tradition of making it through school. Although I was the first one in my family to get a Ph.D., one of my sisters also has hers, and my youngest sister is working on her Ph.D.”

Her only brother is an attorney.

Matthews arrived in Detroit in October of 2013 and has lived downtown ever since. She likes to say she’s “Detroit on purpose.”

“It’s important for me to be in the city and at a university that has a clear vision of education for our community,” she said. “Our university is instrumental in molding the minds of young people and creating leaders of the future. It’s not about what they come here with; it’s about what they leave with. That’s a tremendous responsibility.”

In her role as associate provost of inclusive workforce development, Matthews considers it imperative to be in an environment like Detroit. “It’s in an area that really is conducive to these efforts,” she said. “We build stuff. We do things from the ground to the sky. That, and the chance to take advantage of such a rich pipeline of talent, attracted me to Wayne State.

“And, we work with folks who like to use their hands and folks who like to use their brains. This is the perfect location for that.”

Matthews is eager to lead the university’s STEM learning innovation initiatives for many of the same reasons. “We have an advantage going in,” she said. “This community already knows that STEM is important. They just want to know how to get it all done.

Given that Matthews has more than a few ideas about getting things done, it’s likely only a matter of time before Wayne State’s newest provost is opening the doors for others.

Remembering Judge Damon J. Keith

“Democracies,” federal judge Damon J. Keith once wrote, “die behind closed doors.”

And to many, Keith — a civil rights warrior and one of the nation’s longest-serving federal jurists — was viewed as the beacon that they so desperately needed, a brightly shining symbol of hope, inspiration and, of course, justice. That beacon dimmed for the last time in April, when Judge Keith died at his Detroit home surrounded by family. He was 96.

But at Wayne State University — where Keith earned a law degree and had the Damon J. Keith Center for Civil Rights named in his honor — his memory and legacy continue to shine.

“I had the honor of being sworn in as the 12th president of Wayne State by Judge Keith, but it meant even more to me to have met the man,” said Wayne State President M. Roy Wilson. “At my swearing-in ceremony, Judge Keith said, ‘For Wayne State to be great, it has to be good.’ Since then, I have used those words as my guiding light in the leadership of Wayne State.”

Keith was born in Detroit on July 4, 1922, and graduated from Northwestern High School in 1939. He earned a bachelor’s from West Virginia State College in 1943 and graduated from Howard University School of Law in 1949. He married the late Dr. Rachel Boone in 1953, and the couple had three daughters.

Keith received his master of laws from WSU in 1956. The university opened the Damon J. Keith Center for Civil Rights on campus in 2011 to promote the empowerment of underrepresented urban communities.

WSU launches DetroitEd411 service to help connect, engage community

Wayne State University has launched a new public information service — called DetroitEd411 — to provide the community with free, 24/7 access to resources about postsecondary education opportunities via Facebook Messenger.

DetroitEd411 seeks to empower the community and strengthen the city’s workforce by providing guidance and resources addressing all tracks of education, including vocational training, GED opportunities, community colleges and traditional four-year institutions.

The service is the result of a broader collaborative partnership between WSU and the Detroit Regional Chamber to support adult learners and improve college attainment and career readiness in Detroit. The city was recently named a Talent Hub by the Lumina Foundation and Kresge Foundation — a national designation recognizing cities meeting rigorous standards for creating environments that attract, retain and cultivate talent among today’s students.

“As we continue shifting to a knowledge-based economy, there’s an increasing demand for workers with an education beyond high school,” said Keith Whitfield, WSU’s provost and senior vice president for academic affairs.
cover story

BEYOND BOOKS

How Dean Jon E. Cawthorne is relying on community engagement to help transform the role of the University Library System in the Information Age.
We’re putting people together. We’re putting out the kinds of ideas that interest people. Community engagement activity will continue to increase.

Architecturally, the notion of libraries resting on pillars is as commonplace as the idea of concrete lions lining their front staircases. Philosophically, not so much.

But when Jon E. Cawthorne, the current dean of the University Library System, including the School of Information Sciences at Wayne State, mentions his plan to set the five libraries that he oversees on pillars, he’s talking about a singular vision that transcends bricks and beams — and, for that matter, even books.

More than just a collection of tomes and journals, the system that Cawthorne envisions is equal parts information hub, research lab and community interface, an organic workshop where outside-the-box ideas can marry high-minded ideals about research, diversity, social justice, community engagement and educational equity.

And undergirding it all, says Cawthorne, are his four key pillars for the library system’s growth and evolution: student success, scholarship, culture and people, and community engagement.

“The pillar say this is the way that we’re going to work,” he says during a recent conversation in his office at the David Adamany Undergraduate Library. “Each one of these pillars is very important to define this new way that libraries might work and benefit the campus.”

As librarians go, Cawthorne may not see himself as a maverick, but he regards his distinction as one of the few African American leaders in the information sciences as a calling as much as an accomplishment. Of the men and women who head the 126 research library systems that are part of the Association of Research Libraries — “the biggest and baddest research libraries in the world,” boasts Cawthorne — the WSU dean is one of only three or four blacks in the position.

And he means to make it count. Responsible for oversight of the School of Information Sciences and WSU’s five libraries (the Shiffman Medical Library, the Arthur Neef Law Library, and the Purdy/Kreige, Walter P. Reuther and Undergraduate libraries), Cawthorne doesn’t just want to transform how the campus and the surrounding Detroit communities access information at the five institutions, but how they understand that data and, ultimately, how they leverage it.

Collaborating with the community

Of the four “visionary pillars” he mentions, the community engagement mission, he says, is the one that has been established the fastest since his arrival at Wayne State in August 2017. “We’re addressing that pillar of community engagement right now,” says Cawthorne, who has opened up conference rooms and other spaces within the libraries to community meetings, student organization gatherings and other events. “We’re putting people together. We’re putting out the kinds of ideas that interest people. Community engagement activity will continue to increase.”

Cawthorne admits that the definition of “community engagement” is often an amorphous one that can assume as many shapes as there are engagement efforts. But in his mind, engagement is nothing if not a symbolic bond that ensures that both campus and community prosper and grow together.

“Some programs might send a dance team to dance before the Pistons and call that community engagement,” says Cawthorne. “That’s fine, but what I’m talking about are the ways that we do it to help benefit the students and the community. We are an institution that cares about being in Detroit and being an economic engine of Detroit — so we must be super aware of the issues. And that means providing more places where the community can be heard — and where we can listen.”

To that end, he has been diligent about opening up more of the library spaces, especially for non-traditional events by local organizations and community projects, as a way to promote the library system as a welcome haven to the city beyond the campus. For example, the Undergraduate Library was host last year to the 2018 DHack, a raucous gathering where scores of local college and high school tech wizards descended on the WSU campus to collaborate on software and hardware projects. Sure, the event was loud and clashed with the stereotype of libraries as stone-silent sepulchers, but it also created a citywide buzz and further reinforced Cawthorne’s notion that libraries can be so much more.

According to the Arthur Neef Law Library, the School of Information Sciences and WSU’s five libraries, Cawthorne’s engagement efforts have yielded ideas such as representing the kind of transformational thinking he wants to nurture at Wayne State.

Of course, Cawthorne has always seemed fine with embracing change, even before he came to work at Wayne State. A former hoops star, the Portland, Oregon, native says he turned down a basketball scholarship to focus fully on academics. He also switched sports and became an avid cyclist; he can often be seen riding with President M. Roy Wilson at WSU-sponsored cycling events such as the Baroudeur and the Road Warrior cycling tour. He has lived on both coasts and is on his second stint in Detroit after serving as head of the Detroit Public Library’s main library from 1999 to 2002.

And he doesn’t want change merely for the sake of change. The WSU dean is one of only three or four blacks in the position of concrete lions lining their front staircases. Philosophically, not so much.

Agent for change

Improving engagement also means growing the organization and re-shaping the culture of the WSU library system, another of the foundational ideas upon which Cawthorne’s vision rests. Cawthorne says the library system recently initiated a cultural assessment survey similar to a university-wide “climate survey.”

“Because we did it for the first time, I thought we might have maybe 30 people take it,” recalls Cawthorne. “We have 270 people who work in the library. We had 190 people take that assessment about how they feel, how the library is organized, who makes decisions, how you come to projects. These are all very important things, and if we want to have people just as excited as I am or you are working in the library, they need to be able to talk about the ideas that they have.”

To encourage such exchanges, the library system began to have meetings where staff are encouraged to share unorthodox ideas. Cawthorne, whose School of Information Sciences also has 12 faculty members, says that the meetings have yielded ideas such as creating rooftop gardens on library buildings, WSU-driven research journals and even a seed library that would house assorted vital seeds to grow plants in case of emergency.

While the project likely won’t develop in the near future, Cawthorne views the mere act of offering up such radical ideas as representing the kind of transformational thinking he wants to nurture at Wayne State.
and Wikipedia, Cawthorne is well aware of how ever-widening access to oceans of online data has reshaped many people’s views of — and perceived need for — traditional brick-and-mortar libraries. According to estimates, between Google, Amazon, Microsoft and Facebook alone, the total amount of information stored is about 1.2 million terabytes. Put another way, if all current stored data were divided up among the global population today, every living person would get more than 300 times the amount of information stored in the legendary Library of Alexandria.

Even so, says Cawthorne, the internet doesn’t even come close to capturing the breadth of human knowledge. “There’s a perception that information is all on the internet. It’s actually just the opposite. If my world,” he says, “if all of this knowledge, really what’s on the internet is your thumbnail.”

The deeper dive

Furthermore, says Cawthorne, much of that information is shallow and doesn’t encourage deeper, more nuanced research. “Facebook, Google, all those are great, but people are mistaken if they think that means they don’t need libraries or that they’re getting all of the information online that they need,” he says. “These digital properties are just really surface. When we talk about archives, when we talk about libraries, when we talk about these things, we’re talking about the amount of information in totality. And it’s a lot.”

And information isn’t static, Cawthorne reminds. “For example, we are working with the School of Medicine to help them think about how information sciences intersect with medicine. One doctor over there told me that, in his field, medical information is going to double every 73 days in the year 2020. How many years do doctors train in schools of medicine to then go become doctors? And then a portion of that information is going to change every 73 days. How much information is that? These professions need quality research institutions, quality libraries, not just Google.”

That said, libraries and librarians alike have to rethink themselves, says Cawthorne. “Our profession is very passive,” he says. “We’re set up for people to come in and ask us a question. But really, librarians are researchers and people who facilitate research. Search engines can’t do what we can. That’s why I tell people that the things that happen at the front desk of the library — where people are served — those things are really necessary. The problem is, people aren’t coming to the desk like they should because they think the information is all on the internet. So the desk has to find a way to go to them.”

And that means re-training current librarians and teaching aspiring information professionals new ways of approaching the profession.

“Librarians have great opportunities to connect with people and to show them what we can do as a profession,” he says. “The library is the only interdisciplinary place on the campus, if you think about it. Everybody else has majors, minors, and all the students have to go get their majors and minors. But in the future, what’s going to be really beneficial for the students is an ability to be able to think across those majors. An engineer needs to understand about humanities. We must create an opportunity for them to think in an interdisciplinary way.

Full scholarship

Cultivating greater scholarship, another of Cawthorne’s philosophical pillars, also means working closer with faculty to better spotlight members’ work and achievements, he says. He dreams of a day, for instance, when the university can publish more faculty research rather than have professors give their findings to research journals that the university then turns around and purchases.

“We hire faculty to do research to get promoted and get tenure,” Cawthorne says. “They do that research for free, and then send that research over to journals that are reputational in their fields. And they get published in those journals and get tenure based on that. Then those vendors turn around and sell that research back to institutions. We can’t actually share our research far and wide on the campus because we have these agreements to just buy this research back. The companies have put these inflationary increases in place in the last 25 years. So what it used to cost to buy these journals and what it costs now is just unsustainable for higher education and for the lack of libraries.

“But what it’s made me do is think about where does scholarship live? How can we work differently to educate our faculty to think about where scholarship lives? Because if we can have it in open access, that means the whole world can have access to the research that is done at Wayne State.”

Under the present system, through, universities pay a high price for that research. The WSU libraries’ collection budget is about $9 million, he says, smaller than some other state institutions but nonetheless a considerable sum to pay out for published works. All told, he figures, the 126 research libraries in North America pay upward of $5 billion for these published works.

“These companies have monetized the actual work, and because the faculty want to be in those journals so much, they sign away their copyright,” says Cawthorne. “So now it’s these journals that own that stuff and we’re paying for it. How do we deal with this?”

Cawthorne says he has some ideas, not the least of which is the concept of providing researchers with the tools to publish themselves through the University Library System. He envisions them using open-access journal publishing software and has been talking with President Wilson as well as certain charitable foundations about providing the resources to move the self-publishing vision to reality.

“President Wilson has a very large vision of positioning Wayne State as a top institution of higher education around the world,” he says. “When you think about how universities are ranked as education institutions, when you look at the metric, four of those metrics are about citations. So if you were to create journals that were cited more, you’d raise those metrics.

“Moreover, of the 70,000 journals that we have, all of them are very narrow in scope. You have heart journals, anthropology journals, math journals — and the faculty in each one of these departments all want to publish in those journals. But very few in existence are interdisciplinary. That could be a place where the library can come in and be a place where interdisciplinary journals get created and get support. It’s not like we won’t ever have to deal with vendors. We will. But it’s still about change.”

Cawthorne says the scholarship issue goes to the very heart of the fundamental considerations libraries must make as they reconfigure themselves.

“We are working as fast as we can to say what is a library, and what does our work mean in that context. As part of that, we are going to have conversations about what it means to publish digitally in the library.”

As critical as working with faculty, of course, is the libraries’ ability to empower and help educate the student body. “Wayne State,” he adds, “is the library of the future. A compelling point on the campus is that the library is still the place that is has always been,” says Cawthorne. “The library is a place for ideas.”
Behind WSU’s multifaceted efforts to promote diversity and inclusion in STEM

In his two years as the head of the Wayne State SMASH program, a weekslong summer residency initiative that serves up a technology-heavy curriculum to its high school participants, John Ray has heard the occasional argument about the supposed social neutrality of the scientific method, the racial indifference of mathematics, the cultural blindness of technological engineering. Science, say some, is just science, and any ethnic or racial diversity of its practitioners ought to matter little, if at all.

Ray, however, doesn’t have to look past his own cellphone to refute those propositions.

“I tell the kids in our program — many of whom are African American — just look at your Snapchat filters and you can see that wasn’t built for us and that we didn’t create it,” he said during a recent conversation before the start of a SMASH class in Old Main, the hub of much of the group’s summer activity. “They realize that when they have to look to find a certain type of lighting because that technology wasn’t built to readily identify our skin tones and our skin color. And that makes them think: If they were behind that, then they would automatically take into consideration things like being darker skinned or having darker-skinned friends or family.

“But they are literally left out because the people who are making this technology don’t look like them and don’t think about them when they’re designing.”

Ray said he has made it his mission to ensure that these children, and others like them, are never left out again when it comes to STEM.

“In the Detroit region, since most of our population is minority — we’re 80% or so black in the city — if you don’t create opportunities for black and brown folks in this city, what does that really mean for the majority of population in this space if they are not going to be ready for the workforce?” he asks. “What does that mean for education? What does that mean for society? We’ve literally failed an entire population if we aren’t preparing them for that.

“That’s one big reason why programs like SMASH are so important: so that they can get introduced, exposed and engaged to computer science, and technology, to STEM, because that’s just the way that our workforce is moving and shifting. We cannot leave out a huge majority of our population.”

A look around campus proves that Ray is not alone in this thinking — or his proactive approach. The SMASH program is just one of a growing multitude of science, technology, engineering
and mathematics initiatives — for future college students as well as current ones — that the university backs as part of an ever-expanding effort to dramatically increase diversity in the various STEM fields and to use largely homegrown talent to do so. Rooted in the university’s overall commitment to educational equity, WSU’s push to open 21st century STEM education to students of color, young women, economically disadvantaged children and other oft-underrepresented groups is resulting in bold hires, extended community outreach as well as a growing raft of collaborations with public schools, nonprofits, tech giants and corporate leaders.

“Along with the programs we have for current university students, Wayne State is doing so much more in the K-12 space than people actually know,” said newly minted Associate Provost for Inclusive Workforce Development Tonya Matthews, Ph.D., a one-time president and CEO of the Michigan Science Center who joined the university in early 2019. “Part of that is because we have so many committed individuals, be it faculty and staff, deans and chairs, who are working in many different kinds of ways: some grant-funded, some department-funded, some community collaboration. One of my immediate goals is to be able to shout about the huge numbers of K-12 folks that are coming here and getting their first taste of university, their first taste of STEM, their first taste of their possibility through Wayne State.”

A plethora of programs

And students are getting those tastes all over campus and beyond. Even as programs like SMASH zero in on technology, a wide range of university efforts — some recent, some stretching back decades — have unfolded across a rich assortment of other STEM disciplines.

For instance, in early summer, Wayne State partnered with Quicken Loans to sponsor CodeDetroit, a computer coding initiative targeting 2,000 Detroit public school students that is run out of Durfee Middle School.

The university also works closely with a national organization known as Black Girls Code, which promotes computer science education among young African American women.

Meanwhile, for the past 14 years, the university has sponsored the College of Education and its College of Engineering have struck up a “summer science academy” that draws 500 students between ages 7 and 17 to teach them how to make their own webpages, create their own video games and engineer smartphone applications, among other skills.

“We have shown them everything from creating the app to putting it in the Google Play store,” said Jasmine Roberson, director of community engagement and outreach program specialist for the College of Engineering. “We have even had students actually take their phone apps to market.”

Along with the summer academy, the university also has maintained a 40-plus-year relationship with one of the oldest and most successful local STEM efforts in existence, the Detroit Area Pre-College Engineering Program (DAPCEP), which was founded in 1976. As part of its DAPCEP partnership, Wayne State twice a year brings 300 Detroit public school students to campus on Saturdays to work with engineering alumni. University instructors also use DAPCEP to partner with teachers in the Detroit Public Schools Community District to provide science instruction. And WSU participates in DAPCEP’s annual expo designed to provide Detroit families information about how their children can pursue science education in college.

“We’ve been part of DAPCEP from very early on,” said Roberson. “I can remember Wayne State being involved even when I was in high school. This is one of our oldest and most cherished partnerships, and it’s been very effective over the years in creating an interest in engineering in young people from Detroit.”

Wayne State also collaborates with tech giant Microsoft as part of the company’s TEALS program, which permits tech industry professionals to serve as volunteer teachers each week in public schools suffering a shortage of teachers and equipment. Through TEALS, which stands for Technology Education and Literacy in Schools, students learn about coding, computer science, cybersecurity and more.

Computer coding is also the nucleus of the university’s partnership with the Black Girls Code effort. Both WSU’s College of Education and its College of Engineering have struck up partnerships with Black Girls Code over the past decade.

Meanwhile, the six-week SHAPE (Summer High-School Apprenticeship Program in Engineering) program, also run out of the College of Engineering, aims to educate underrepresented students in emergency energy technologies and 3D modeling.

Students are taught mechanical engineering concepts and skills like material synthesis, battery design and mechanical testing.

One of the biggest events that spotlights the university’s commitment is Wayne State STEM Day, a daylong showcase designed to expose the hundreds of students who attend each year to the wonders of science and technology.

Associate Marketing Director Julie Hasse, who coordinates STEM Day, noted that while the event is open to all students, she remains mindful of reflecting diversity both in the attendees as well as the participants whose work and expertise are spotlighted. “It’s very important to have a wide array of people. We aim to get students, staff, faculty and anyone who is a subject matter expert.”
Why diversity matters
Along with the formal programs, the campus is teeming with professors, student and professional groups, staff, and administrators who have taken even more personal interests in promoting diversity and encouraging students of color to pursue STEM careers.

“We have individual faculty members who, through single grants sometimes, are stewarding 10 or 15 students in these amazing ways,” said Provost Matthews, herself a biomedical engineer who has founded the STEMinista Project, an initiative that supports middle school girls in exploring STEM careers. “That cannot be discounted.”

WSU Engineering Professor Howard Matthew, Ph.D., a chemical engineer whose research focuses on bio medical advancements, talks warmly about how he often tries to open his lab to allow high school students — most of them African American, African and Middle Eastern — to come in and work on research projects with the grad students he oversees.

“It’s definitely important to get a multiplicity of ideas any time you’re dealing with societal issues,” said Matthew. “Be it health issues, medical issues, pretty much any issues that affect multiple people or any issues that are particularly difficult and challenging — you want to have a broad range of people looking at those challenges. The more important the problem, the more ideas and minds you need applied to it. Because people, based on their backgrounds, come at a problem with a different mindset, different view. Things that group A may take for granted, group B will say, ‘Well, that’s not how it works where I come from.’”

One hope is that increased inclusion will mean a high-tech multiplicity of ideas any time you’re dealing with societal issues.

— Howard Matthew, Ph.D.

Seeing success
The efforts go beyond just the university units focused expressly on science, math and engineering. The WSU College of Education recently hosted the 55th annual regional Junior Science & Humanities Symposium (JSHS), a national program supported by the U.S. Army and administrated by the National Science Teachers Association. Last year marked the inaugural year for the College of Education’s Upward Bound program and for a partnership funded by the Army Education Outreach Program to promote the participation in both the JSHS and STEM research to underrepresented high schools.

In March 2019, 33 students from high schools across Michigan presented research projects at the JSHS, including 17 students from the college’s Upward Bound program, which also focuses on underrepresented students from disadvantaged groups.

“This partnership between the JSHS and Upward Bound was extremely successful at engaging underrepresented and underserved students in comparison with the previous year’s regional JSHS,” said WSU Assistant Professor Sandra Yarima, who coordinates the science education program at the university.

At the College of Nursing, a number of students are engaged in STEM through C2 Pipeline, a program sponsored by Wayne State University’s College of Nursing. The C2 Pipeline program relies on hands-on, project-based STEM learning activities to engage and educate students and foster interest in STEM careers and the health care profession.

Of course, for all the focus these and other programs place on nurturing high school students and children even younger, Wayne State also continues to make heavy investments in nurturing students and children even younger.

Steven Kahn, founder and director of the center, said the programs have seen dramatic results over the past 25 years: “ESP essentially has closed the achievement gap. So the difference between all students and minority students is incredibly small compared to what it usually is.”

Sustaining momentum
Given these achievements, STEM leaders at Wayne State are optimistic that their sustained, head-on effort to improve STEM learning, combat discrimination and broaden access will ensure that the university’s impact on science, technology and related fields resounds for many years to come.

Talk with students like Tarrin Dewberry, an 11th grade student at Detroit Renaissance High who participates in the SMASH program, and you get a strong sense of why that optimism abounds. Dewberry harbors a deep passion for multiple fields of science and technology and study because they are going to affect everybody’s lives.

“Chemistry, physics, biology — I like all of those,” explained Dewberry. “Because STEM is a major part of life. And when it comes to making big decisions, you want diversity in those fields of research and study because they are going to affect everybody’s lives.

“This year, my class is talking about contamination. We want to create a way to reduce contamination or even prevent it. We can’t just put that in the hands of just one group of people because it affects all of us. I want to know more about issues affecting my community so I can use information to not only spread awareness about a problem but create solutions.”

And for the scientists who’ve preceded Dewberry, clearing hurdles for the thousands of aspiring physicists and chemists like her is much of what motivates their work today, both in and out of the laboratory.

“One of the promises of now is that, for better or for worse, we are actively talking about the bias, about the prejudice, about the hostility that is out there,” said Matthews. “These conversations could really accelerate our ability to diversify and include in these fields — and I always like to remind folks that these students are the best of the best, the smartest of the smart. When you come out of Wayne State with an engineering degree, computer science degree, information tech — whatever it is that you come out with — you are one of the best of the best. You’re one of the smartest of the smart. You can problem solve. You can problem identify. You can do cost-benefit analysis. You can change the world.”
DEATH in the Family

Mortuary science alumnus among latest generation to extend Detroit’s funeral home tradition

Stephen Kemp Jr. remembers the first time he realized what his father did for a living. His dad, Stephen Kemp Sr., had just picked him up from elementary school but didn’t have time to take the boy directly home. Instead, dad took son with him back to his job at Stinson Funeral Home in Detroit.

For the younger Kemp, a typical first-grade kid, the building might as well have been a playground at first, as he raced through assorted rooms, laughing and playing hide-and-seek with some of the funeral home attendants. Eventually, he made his way into the “merchandise selection room,” where caskets and other commercial burial items were on display. Then he ventured farther.

“There was a little hallway back just beyond the merchandise selection room,” the now 27-year-old Kemp Jr. recalled during a recent conversation. “Naturally, I was curious. I kept walking back there until I finally realized it was the prep room.”

It was here, in the room where morticians like his father readied the deceased for burial, that young Kemp Jr. began to grasp the nature of his father’s job. Though he was admittedly frightened at first, quickly skittering out of the prep room that day to go searching for his father, Kemp Jr. gradually learned to appreciate his father’s business.

Eventually, he joined it. He began by working odd jobs for his dad at Stinson as a kid. By 17, Kemp Jr. was parking cars and serving as a funeral-service attendant for the O.H. Pye III Funeral Home in Detroit. After earning a business degree in Missouri in 2015, he returned home and enrolled in Wayne State’s Eugene Applebaum College of Pharmacy and Health Sciences as a student in the mortuary science program — the same program his father had graduated from in 1988. Kemp Jr. earned his bachelor’s in 2018 and passed the National Board Exam to become licensed.

Heir to a legacy

In so doing, Kemp Jr. wasn’t merely following his father’s path, but also enlisting in a decades-long tradition of family-run and -owned African American funeral homes that have been fundamental pillars of Detroit’s black community for at least a century. Consider that, in addition to the Kemps, Detroit is also home to prominent businesses such as the 100-year-old James H. Cole Home for Funerals, the oldest black-owned funeral home in Detroit; the Swanson Family of Funeral Homes; the Stinson Funeral Homes; the now-defunct but no less revered Diggs Funeral Home (absorbed by Stinson); Butler Funeral Home; and O.H. Pye III.
Rooted in a time when white-owned funeral parlors refused to serve grieving black families, today’s black funeral homes remain critical to African American communities, a resilient presence that transcends neighborhood boundaries and class lines alike. A black-owned funeral home is still as likely as the Swanson Family of Funeral Homes did when the Queen of Soul passed away in 2018) as for an obscure local one. We grow closer spiritually and financially, and we grow as a family. It’s about being at churches, as well as social events, getting to know people, building your business in the community. You’re continuing to actively engage with the community after the death.”

— Stephen Kemp Jr.

Meanwhile, Wayne State’s Department of Mortuary Science has continued to be a constant in this tradition, with many prominent black morticians earning their credentials through the program. Alumni include James Cole IV, O.H. Pye III, Charles Diggs Jr., and now the Kemps. The lessons have paid off, according to those who know Kemp Jr. “Stephen has characteristics that will make him successful in funeral service. One of those is his approachability,” said Evely. “He genuinely respects other people. He is able to adapt to difficult situations, maintain his composure and just be a kind person. Those are all traits you have to have if you’re going to be successful.”

Meanwhile, Kemp Jr. credits the mortuary science department’s practicum experience with helping to sharpen those crucial characteristics needed in the funeral service industry. “We have the experience of going to different funeral homes and learning about what they do,” he said. “That’s what I loved about the program: learning about what other funeral homes do.” Kemp Jr. said, “What can we bring back? What can I learn from them to make my service better for everyone?”

Well schooled

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When you have parents who are in funeral service and own a funeral home, Evely said, “you see the demands that are placed on their time. You see the emotional demands of funeral service. I think that dissuades a lot of people who have family in the business from going into it themselves. They want a greater work-life balance than their parents had as funeral directors.”

Not so for Kemp Jr., though.

Family tradition, business decision

From his early days at O.H. Pye III, Kemp Jr. immersed himself in the business, learning its nuances from the ground up. “It was exposed to a higher-volume funeral home, what they do and how they operate,” he said. “That’s what got me into the business. I learned how they interacted with their employees, how they managed the whole operation and, basically, putting together the ‘two and two’ of business and mortuary science.”

Kemp Jr. had considered a career in insurance for a while, especially after earning his business degree. His father had always encouraged him to “find your own thing,” he said. But when his dad decided that he wanted to break off from his employer and start a family business of his own, Kemp Jr. jumped in to help.

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And the impact of that service resonates far past the walls of the family business. To this day, he said, families whom the Kemps have served over the years still stop by the funeral home to say hello or to ask them to lunch. Explain to Kemp Jr. “It’s not necessarily being at the funeral homes. It’s about being at churches, as well as social events, getting to know people, building your business in the community. You’re continuing to actively engage with the community after the death.”

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Cookie dough company co-founded by alumnus enjoys success

Back in 2017, Wayne State graduate Daniel A. Washington and his friend Autumn Kyles came up with an idea to make a few bucks and, along the way, join the rejuvenation of Detroit’s growing food scene.

Kyles, a technology consultant, had found out about a successful edible cookie dough shop in New York and figured that Detroit was ripe for something similar.

Two years later, the edible dough concept that Washington and Kyles thought was a “quaint” idea to peddle out of their NW Goldberg neighborhood to friends and neighbors has become a thriving business — aptly named Detroit Dough — that reaches into theatres, sports stadiums and even the Michigan Science Center.

“We have gained a lot of traction and have managed to sustain ourselves,” said Washington, 25, who graduated from Wayne State in 2014 with a communication degree and serves as Detroit Dough’s chief marketing officer. “We’ve had some ups and downs, but we’re doing well. And we’re hoping we can continue to grow.”

Washington said that it wasn’t difficult to get the company going, as his brother is a “self-taught” pastry chef, his sister a chemist, Kyles an M.B.A. and he a communications expert.

“I also had some property, so we pretty much had what we needed right from the start,” he explained. “I knew it was a good business model, so it made sense to try.”

After figuring out how to pack and distribute the dough, Washington and his business partners quickly began getting the word out. The group placed second in a “dolphin tank” business pitch competition. The day afterward, they opened a pop-up shop in Detroit Clothing Circle in Midtown, near the Wayne State campus.

Washington said the reaction during the first two days at the shop was overwhelming: “After we hit the pop-up circuit, we sold $8,000 worth of cookie dough in less than 12 hours. We were drawing people from Lansing, Grand Rapids, Flint, Novi — whatever city in Michigan you have, people were coming from there to buy this cookie dough.”

But after three months, Washington recalled, business began to cool. As 2018 began, he started to worry that their idea, while attractive at first, was ultimately fizzling out.
“I was anxious,” he admitted. “I didn’t really feel like we had this business any more. It seemed like there were a lot of copycats. I didn’t know if the model was sustainable. And I was worried that, as a cash-strapped, black-owned business, we couldn’t compete.”

On a whim, the Detroit Dough team reached out to the CEO of the Emagine Entertainment theatre chain in a longshot effort to buttress their flagging, but promising, product by getting it into the chain’s concession stands. And it worked. Miraculously, the tiny cookie dough maker managed to ink a pilot deal, with hopes for a long-term distribution deal with the theatre chain, bringing Detroit Dough’s product to multiple Emagine outlets.

And while the deal eventually expired, it enabled Detroit Dough to take a major step forward. Even before the deal ended, Washington said, his company had begun to streamline its business processes in anticipation of scaling to meet demand.

Since then, the dough, edible and otherwise, has only continued to rise. Offering five distinct flavors — sugar, brownie, peanut butter, chocolate chip and plain — Detroit Dough has cemented deals to sell its product at the University of Michigan football and basketball stadiums; at the ballpark in Utica that is home to the United Shore Professional Baseball League; at Detroit City Football Club soccer matches in Hamtramck; and at the Michigan Science Center.

In July, Detroit Dough inked a deal to sell its products at the popular Bel Air Luxury Cinema complex on the city’s east side. That deal followed an agreement earlier this year with MJR, a regional theatre chain, to sell Detroit Dough products from the concession stands at seven of its theatres just in time for Washington’s company to take advantage of the throngs flocking to see the blockbuster Avengers: Endgame.

“We definitely got a bounce from the Avengers movie,” Washington confirmed.

Over the summer, Detroit Dough was also named a winner of the Detroit Demo Day showcase held at the Fillmore Detroit, earning the company a $225,000 prize.

Washington said that the company’s revenue has skyrocketed from $110,000 in 2018 to a projected $350,000 this year — not bad for a now three-person company that still packs and weighs each cup of cookie dough by hand. (By Washington’s estimation, he and his business partners have packed more than 45,000 cups of edible dough since they started.)

But Detroit Dough doesn’t just pocket its profits. Washington, who has owned property in NW Goldberg since he was 18 and still lives in the area, said that his company gives back 5% of its earnings to the neighborhood through its “Dough That Makes a Difference” pledge campaign. So far, the company has contributed more than $7,500 to the community, much of it through NW Goldberg Cares, a nonprofit that Washington founded.

Washington said the charity, as well as his entrepreneurial designs, all stem from a broader commitment to Detroit that he cultivated during his time at Wayne State.

“For me, it’s always been about being home and close to the action,” he said. “When you talk about Detroit, Wayne State plays an integral role in that. Having an institution that prepares its students, through internships, exposure, and proximity to the action, gives the WSU student an advantage. I knew I didn’t have to wait to dabble in entrepreneurship. WSU really prepared me.”
The impact of Detroit Hives goes beyond the bees, though. From May to October, schools, churches and community organizations tour Detroit Hives to learn more about the nonprofit’s conservation efforts.

Going into their second full year with Detroit Hives, Jackson and Lindsay are hoping to reach multiple goals. They are applying for grants that would allow them to work for Detroit Hives full-time. Currently, Jackson works doing photography and advertising while Lindsay works for Henry Ford. As a part of their five-year plan, the pair is working to expand to 200 hives by 2022. Ultimately, they plan to open an educational community learning center.

In the meantime, caring for the bees is Detroit Hives’ most direct way of making an impact — and the group takes its calling seriously.

A couple of days after watching the swarm of bees leave his backyard hive, Jackson learned that the swarm has settled safely in a raspberry bush in a yard around the corner. Readying to go collect the bees to place them in a new hive in his yard, Jackson explained that pheromones give each hive a scent that’s familiar to the bees, ensuring that they don’t stray too far away from their hive.

Detroit Hives seems to have learned a version of this lesson itself as the collective spreads steadily throughout Detroit’s communities, alighting comfortably in unlikely spaces and, along the way, leaving each a little bit sweeter.
Engaged:

A Q&A with …

Assistant Professor Billicia Hines,
director of the WSU Black Theatre and Dance Collective

Rooted in the response by colleges to the politically driven Black Arts Movement of the turbulent 1960s, the Black Theatre and Dance Collective (BTDC) — part of Wayne State’s Maggie Allesee Department of Theatre and Dance — continues to amplify the voices, onstage and off, of communities, experiences and lives that are too often ignored in mainstream works.

Led by Assistant Professor Billicia Charnelle Hines (left), the program has continued to establish itself locally as both a crucible and showcase for exceptional student talent and as a respected ambassador for the university abroad. In July, for instance, nine actors in the Freedom Players — one of the ensembles in the Black Theatre and Dance Collective — traveled to Scotland for the Edinburgh Festival Fringe, the largest international theatre festival in the world.

Hines, who has overseen the program for the past five years, sat down for an interview to discuss the state of the BTDC and where she sees it heading as it continues to find new ways to grow its work, its audience and itself.

CAN YOU GIVE AN OVERVIEW OF THE HISTORY OF THE BLACK THEATRE AND DANCE COLLECTIVE?

Yes. It began as the Black Theatre Program. A year after the rebellion in ’67 happened, that’s when the Black Theatre Program started. And it was because of the fact that black people were not given the opportunities to be on the stage. There were some whites at that time who felt that black students could not play those roles in white plays. And as a result, those students were not given any opportunities. So some of those students, and even some students from other departments, stood up and responded by fighting for a black theatre program. Since then, we’ve had some ups and downs, some ebbs and flows, depending on how the program was being run. But we’ve always tried to remain close to the artistic community here in Detroit, especially the black theatre community, as a way of upholding the ideals that led to the program being founded.

Now we have an opportunity. We have the support within the school to really push. A lot of people in my department right now are really supportive of trying to improve things and really make the department more diverse. And we have a minor, Africana Theatre and Dance, which is three years in existence. I’d like to emphasize how great it is to collaborate with Ras Michael Courtney and Karen Prall. They are the other two professors in the Black Theatre and Dance Collective. Dr. Courtney’s focus is Ethio-modern dance, and Ms. Prall is the artistic director of the To Sangana African Dance Company. The three of us have been working tirelessly this year to continue to create a program that allows another standard to be celebrated.

HOW HAVE YOU TAKEN ADVANTAGE OF THOSE POSSIBILITIES? WHAT DO YOU THINK HAVE BEEN YOUR BIGGEST CONTRIBUTIONS AS WELL AS SOME OF THE BIGGEST CHALLENGES?

I think that some of my biggest accomplishments are finding ways of being inclusive. Many times, black history has been taught within this confined box, this “other.” It’s done in secret or in some confined time. However, it is never mainstream and seen as American history. There is never enough acknowledgement, funding and, of course, respect that it needs and deserves. It is time that new standards be interwoven and uplifted. We need greater diversity and inclusion, and that’s one major goal I am pursuing.

And with the black students, I’ve been spending time teaching self-worth. So within the world of theatre, studying Shakespeare is not the only way to a professional career. It’s great to know that, but what about studying August Wilson’s plays as high-stylized language? There

A Q&A with …

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are so many African rituals and traditions that are not acknowledged as the beginning of theatre. Greek theatre is viewed as the beginning. There is so much worth in knowing and embodying black theatre — and it makes such a big difference when students of color can train where they can see themselves. I am so glad that the Maggie Allesee Department of Theatre and Dance here continuously supports what I do in creating change.

WHAT DREW YOU TO WAYNE STATE UNIVERSITY?
I come from North Carolina, and I worked at Elizabeth City State University, a small HBCU in the northeastern part of North Carolina. I was the director of that theatre program. It’s a small program, and I was trying to make it a major there because it was only a minor. I was building things over there, but I wanted something better for myself. While applying to other places, I saw this job opening, applied and was eventually hired.

I was immediately attracted to this position; I was told they were trying to rebuild this black theatre program. It was inactive for four years. I thought that was something I would love to do — make a difference. This area seemed like a place where I could be able to do something, and I felt like the energy around here exuded positive change. I felt the “possibility.” I love the possibility of creating change.

WHAT’S YOUR VISION FOR THE PROGRAM’S FUTURE?
I want to take the program to where it has an international presence. I want it to be self-sustaining. I want it to be beyond one person. I want it where we have an endowment specifically for the program so then, when people come in, we have scholarships specifically for people who are going to minor in it and who are a part of that program.

And I would rather not settle for an “itty-bitty” endowment where you have to pass the plate around for $5. I want millions! Basically I want the program to eventually be self-sustaining. Going to Edinburgh, Scotland, to perform was such a phenomenal experience for the students and the program as a whole. I hope in the future we can take a yearly trip to a country of the African Diaspora where they can train and perform. So when these students graduate, they would have had an opportunity to see performances, train and network throughout the country and abroad. Ultimately, the students will be able to use these experiences to develop their professional career.

By the Numbers
Wayne State University’s total annual research expenditures $221.5 million

Students participating in the C2 Pipeline program overseen by the WSU College of Nursing 4,206

Wayne State Law School graduates who live and work in Michigan 75%

Approximate number of startups and small businesses created with assistance from TechTown, Wayne State’s business incubator 2,000

Wayne State University’s annual financial aid provided to WSU students through merit scholarships, grants, loans and work-study programs $340 million

Of Michigan’s practicing physicians who received all or part of their medical training at Wayne State University 40%

Impact to Michigan’s economy by the University Research Corridor, a collaboration between Wayne State University, Michigan State University and the University of Michigan $18.5 billion

75% WSU alumni who live in Michigan, providing leadership for the state’s economic revitalization

20,000 Approximate number of at-risk mothers in Detroit cared for since 2002 by the National Institutes of Health’s Perinatology Research Branch, which is housed at Wayne State

4,206

2,000

$340 million

40%

$18.5 billion

75%

$221.5 million

4,206

75%

2,000

$340 million

40%

$18.5 billion

75%