Percy Pierre - the man "who changed the face of engineering" - says good bye to MSU

There’s a hall of fame that sits on three shelves in Percy Pierre’s office in the Michigan State University College of Engineering. The black bound volumes of PhD dissertations begin with his own from 1967 and travel through time from Dale Joachim’s in 1998 to more recent ones, including Kayra M. Hopkins and Armand Rashad Burks in 2017.

They are symbols of Pierre’s 28 years at MSU as he winds down a 50+ year career as an engineer, researcher, administrator, faculty member, and HistoryMaker. He has mentored more than 200 minority and non-minority engineering master’s and doctorate graduate students in engineering.

Pierre will retire at the end of 2018 among the most celebrated members of the MSU College of Engineering – or any engineering college in America. In 2009, he was elected to the prestigious National Academy of Engineering – the first to be elected from the MSU faculty – for his work administering research and development for the U.S. Army.

At MSU, his academic titles include vice president emeritus and professor of electrical and computer engineering.

Nationally, he is recognized as the first African-American to receive a PhD in electrical engineering. He is the first African-American appointed assistant secretary of the U.S. Army for Research and Development, and the first African-American appointed Acting Secretary of the Army.

Pierre is considered by many as the country’s principal architect of programs to recruit, retain, and graduate minorities and students from underrepresented populations in the multi-disciplinary fields of engineering. And while his long biography and awards list showcases his half-century in diverse organizations around the country, his favorite points of pride are defined and clear.
“I set out to be an engineer,” Pierre began. “Growing up, I liked to build things – I enjoyed carpentry. I wanted to be an engineer and here’s what happened.”

Pierre graduated from a Catholic high school in New Orleans and attended the University of Notre Dame on scholarship, receiving bachelor’s (1961) and master’s (1963) degrees in electrical engineering. Next came a PhD in electrical engineering at The Johns Hopkins University (1967).

“I prepared myself to be a faculty member along the way,” Pierre explained. “After my PhD, I did a post doc from 1967 to 1968 when engineers didn’t do post docs. I’m told that I was the first engineering post doc at the University of Michigan. I loved research then, and I still do.”

In 1968, rather than taking an academic position, Pierre went to the Rand Corporation in Santa Monica for research in his technical area and to explore engineering applications that would impact urban problems. That experience propelled him further into his two life goals.

“I not only wanted to make an impact in my field, I wanted to have an impact on the country and particularly on the lives of African-Americans,” Pierre said. “I had two jobs that I feel impacted the country.”

Pierre served as a White House Fellow during the Nixon Administration, working for Daniel “Pat” Moynihan on domestic affairs. He served as deputy to the Assistant to the President for Urban Affairs from 1969-70.

He’s particularly proud, he said, of the work he did in the Pentagon several years later. As Assistant Secretary of the Army for Research, Development and Acquisition from 1977-81, Pierre managed $12 billion annually of Army research, development and procurement, including the completion of the development and initial production of the Abrams Battle Tank in 1979, the Patriot Missile System in 1980, and the Apache Helicopter in 1980. He then became Acting Secretary of the Army in January 1981.

His positive impact on the lives of African-Americans spans his career. He served as dean of Engineering at historically black Howard University in Washington, D.C. from 1971-1977. There he designed and introduced a variety of innovative programs, including the creation of urban system engineering that utilizes engineering practices in resolving urban problems.

From 1983 through 1989, he served as president of historically black Prairie View A&M University, which is part of the Texas A&M University system. He advocated for passage of an amendment to the Texas Constitution in 1984, strengthening Prairie View’s access to finances, upgraded academic programs, recruitment, enrollments, and graduation rates of underrepresented populations.

In 1990 – and for the next 28 years – he turned his focus to Michigan State University.
As vice president for research and graduate studies and professor of electrical and computer engineering from 1990 to 1995, he brought his varied experiences to help MSU catch up to other Big Ten universities in the acquisition of federal support for research and education. He directed the strategy for increasing federal research awards by seeking large research center grants. MSU’s successes included a food safety and toxicology center, multi-million dollar National Science Foundation centers, and major technology and defense grants.

Since 1995, he has taught undergraduate and graduate students, conducted research, and developed more programs to impact students in underrepresented populations. Pierre created and managed the Sloan Engineering Program, the GE Faculty for the Future Program, the Enabling Technology for Micro and Nano Engineering Systems Program and others to increase the number of engineering graduates at the master’s and doctoral levels.

“I enabled the graduation of a lot of folks in electrical and computer engineering through the years,” Pierre said in a soft-spoken tone.

Yue Qi, associate dean for Inclusion and Diversity in the College of Engineering, shared metrics on one of Pierre’s successes at MSU – The Sloan Engineering Program. Qi said the Sloan Program has supported the graduation of 218 underrepresented minority graduate students with master’s degrees and/or doctoral degrees in engineering.

“According to American Society for Engineering Education PhD enrollment demographics data, MSU is #2 in the nation for the number of African American students pursuing a PhD in electrical and computer engineering (ECE) in the last three years,” she said. “The national average for African American ECE PhD students is about 3.4 percent. At MSU, it’s around 19 percent. Those numbers say how much change his sustained efforts have made,” she added.

Those he recruited, supported, mentored and befriended aren’t quiet about Pierre’s accomplishments.

“Dr. Pierre has no idea of the extent, reach, and impact that his life has had on others because it resembles a drop in a pond and all its ripple effects,” said Nadya Santiago, professor of electrical and computer engineering at the University of Puerto Rico, Mayaguez. “He was one of the founders of the National Action Council for Minorities in Engineering (NACME), and I was able to study and pay for my education because I had the NACME scholarship. He suggested my name for my first collaboration, which became my first proposal, and my first grant when I was just barely starting as junior faculty. He impacted my life in so many ways and indeed, the careers of my students are the ripples in the life pond that Dr. Pierre’s life caused. He has changed the face of engineering for the better.”

Bradley Perry, assistant group leader of RF Technology at the Massachusetts Institute of Technology Lincoln Laboratory, said Pierre is a model for what a truly successful professor and human being should be.

“He works tirelessly for the advancement of others and truly cares about the well-being of all students and the MSU College of Engineering,” Perry said. “I am honored to have been associated with Professor Pierre both throughout my graduate school days and beyond. He has worked with various alumni here at MIT Lincoln Laboratory to keep MSU students in the pipeline and highlight their talents.”

Anthony Plummer Jr., senior communications and networking engineer at Johns Hopkins University Applied Physics Laboratory, said Pierre’s role in his life has been impactful.

“Since the first day we met Dr. Pierre in the spring of 2005 at Morgan State, he has supported my wife, Raenita, and I in many of our professional endeavors. There are too many to list but here are a few: paving the way to attend Michigan State, connecting me with a director at the Naval Research Lab that led to a job interview, visiting my current employer at Johns Hopkins University Applied Physics Laboratory multiple times to support MSU students. I have truly appreciated all his support over the past 13 years and wish Dr. Pierre well on his retirement.

Andres J. Ramirez, a PhD in Quant Research at Citadel Securities in Chicago, said Pierre’s extensive career is filled with impressive accomplishments.

“Perhaps more important than being a pioneer in engineering, he dedicated a significant portion of his life to ensure
the same road was paved for others wanting to follow his footsteps,” Ramirez said. “Dr. Pierre took a big chance with many of us who came in directly from undergrad often without a clear career path. Still, he was able to see and nurture our potential. We are here today because he cared enough to dedicate time and resources to help develop us professionally,” Ramirez added.

Nelson Sepulveda, associate professor of electrical and computer engineering at MSU, said Pierre transformed many lives in many ways.

“I personally don’t like the word ‘retirement.’ It sounds too strong. The word sounds as if your work is done. It is not. Your work during all these years has converted many lives, which will continue working. So go and enjoy your ‘free-time,’ perhaps watching the fruits of your hard work all these years; seeing all the converted lives succeed on your behalf.”

Uche Wejinya, associate professor of mechanical engineering at the University of Arkansas in Fayetteville, directs the Arkansas Micro & Nano Systems Laboratory, along with the NSF REU in Nanomaterials, Nanomechanics, and Leadership Training in Engineering, and NASA Robotic Mining Competition student team.

“Your wisdom and guidance, unwavering support for teaching, learning, and mentoring, and the good you see in people before they see it in themselves, made it possible for me to become who I am today,” Wejinya said about Pierre. “Through the Sloan program, sustainable mentoring, and excellent pairing of research advisors, I made it through the MS and PhD degree programs in ECE at MSU. I will forever be grateful.”

Pierre’s retirement plans are to spend time with his wife of 53 years, Olga, and settle back in his hometown of New Orleans and in Washington, D.C., where his two daughters live. He also expects to be active on issues he cares about including engineering and the advancement of minorities.

“I started out to be an engineer and through engineering I have had other impacts. I still think of myself as an engineer. I still love being an engineer,” he added.