

BUCKEYE ENGINEERING



Dean transition:
A look back, a look ahead



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

INSIDE / POWERFUL PARTNERSHIPS
INNOVATORS OF THE YEAR
AWARD-WINNING ALUMNI

A decade of impactful leadership

After leading the College of Engineering to historic growth, David B. Williams will step down as dean at the end of February.

Since he was appointed dean in 2011, the college has transformed in size, stature and impact. During his tenure, the college's annual budget has increased more than 40% to \$300 million, and external gifts and donations total nearly \$500 million.

"I have been privileged to be the dean of an extraordinary college, staffed by the best team I have ever led, where the brightest students are taught by talented, committed and diverse faculty and staff," said Williams, the Monte Ahuja Endowed Dean's Chair. "Our alumni and industry partners are generous in the extreme."

Over the past decade, faculty numbers climbed from 289 to 412, with a 112% increase and 121% increase in female faculty and minority faculty, respectively. Diversity of the college's

leadership team also improved; today 41% of the Executive Committee are women.

Since 2011, the college has invested \$300 million-plus in new and renovated facilities. Academic programs and online offerings have also expanded, including the creation of the engineering technology degree now available on the Lima, Mansfield and Marion campuses.

Although he'll miss the team he built and people he works and interacts with, Williams said the time is right for the college to have a new leader.

"Putting the college in a good place fiscally and personnel-wise, then I think that's a good time to hand it over to somebody else and say, 'Okay, the base is firm. Now, build as much as you can on the foundation and the stability that I put in place.'"

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Poised to lead

On November 30, The Ohio State University announced accomplished roboticist, entrepreneur and educator **Ayanna Howard** would become the next dean of the College of Engineering. She will begin her tenure on March 1.



Currently, she is chair of the School of Interactive Computing in Georgia Institute of Technology's College of Computing, as well as founder and director of the Human-Automation Systems Lab. Dean-designate Howard's career spans higher education, NASA's Jet Propulsion Laboratory and the private sector. She is the founder and board president of Zyrobotics, a Georgia Tech spin-off company that develops mobile therapy and educational products for children with special needs. In 2018, *Forbes* named her to its America's Top 50 Women In Tech list.

"Dr. Howard is an innovator whose skills and passion are a perfect fit with Ohio State's focus on convergent research and discovery," said President Kristina M. Johnson. "To attract a leader of her caliber shows both the strength of our engineering program and the acceleration of the university's overall research mission."

She will be the first woman to lead the College of Engineering. Nationally, only 17% of engineering deans or directors across the country are female, according to the Society of Women Engineers. She also will become the college's second Black dean. Throughout her career, Dean-designate Howard has been active in helping to diversify the engineering profession for women, underrepresented minorities and individuals with disabilities.

"I'm thrilled to join Ohio State at a time in which there is so much potential to strengthen and build new partnerships in order to expand access and enhance opportunities for the next generation of students, alumni and for economic development throughout Ohio," she said.

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\$40M Air Force partnership to improve diversity in STEM

The Ohio State University and the U.S. Air Force are creating a national consortium to increase opportunities for minority STEM students and graduates. Ohio State will co-lead the new effort with several universities and the Air Force Research Laboratory (AFRL) at Wright-Patterson Air Force Base.

The six-year, \$40 million project, funded by the AFRL, will include summer internships for minority engineering students, access to specialized research equipment and laboratory space, and support for projects. Ohio State will also work with minority institutions in developing technical proposals for research funding and will work collaboratively to create lasting infrastructure that encourages diversity in Air Force hiring.

“This funding provides an exciting opportunity for Ohio State to partner with minority institutions from across the nation to develop creative approaches to cultivating a prepared, diverse research workforce for the next generation of scientists for the U.S. Air Force,” said Morley Stone, senior



Dept. of Defense image

vice president of research at Ohio State. “In addition, through this work, these organizations will be better positioned to propose and perform on AFRL research opportunities and the larger U.S. Department of Defense enterprise.”

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Buckeye engineers named Innovators of the Year

Two engineering professors received The Ohio State University’s top innovator awards, which recognize researchers who are working to promote commercialization of university intellectual property.

Alper Yilmaz, professor of geo-informatics in the Department of Civil, Environmental and Geodetic Engineering, is the university’s Innovator of the Year. Yilmaz was nominated because of his development of wireless geolocation technology. The patented technology is the basis of the startup Ubihere, which is commercializing 2D and 3D tracking technology for real-time asset location.

Computer Science and Engineering Associate Professor Arnab Nandi was named the Early Career Innovator of the Year. His work focuses on bridging human interaction and data infrastructure. He is also founder and CEO of Mobikit, a data infrastructure platform for the future of mobility.



“Research and innovation are at the heart of what I want my presidency to be,” said President Kristina M. Johnson. “It’s also at the heart of our land-grant mission and it’s how we influence those we serve. The way to serve is by doing research in the betterment of society.”

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Ohio State, Honda partnership marks two decades of success

The 20-year partnership between Ohio State and Honda was celebrated last fall as leaders from both organizations, and state and local government, discussed the benefits the agreement has had on the university, the company and region during a livestreamed event.

Over the partnership's lifetime, Honda has provided more than \$28 million in research funding to Ohio State, some of which has helped establish the Center for Design and Manufacturing Excellence, the Simulation Innovation and Modeling Center, and the Driving Simulation Lab. Honda has funded 235 research projects at the university over the last five fiscal years and also funds six endowed chairs, which help recruit top talent to the university.

Additionally, the unique relationship provides professional development opportunities for students, faculty and Honda associates. Honda hires 50 to 60 Ohio State students each year for internships and full-time positions, and facilitates experiential learning for undergraduates through a capstone program.

Honda has donated more than \$68 million to Ohio State over the years, funding faculty, students and programs.

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Students win grant to teach kids coding

A student organization dedicated to empowering women in computer science received a \$25,000 grant to teach kids about coding and improve diversity in the fields of science, technology, engineering and math.

The Association of Computing Machinery Women's Chapter (ACM-W) at Ohio State is one of seven 2020 Ford College Community Challenge winning teams selected by the Ford Motor Company Fund. ACM-W members will work with local public schools and College Mentors for Kids to distribute computer science starter kits to upper-elementary and early middle-school-aged children. The kits will teach the basics of programming logic and give students the opportunity to channel their imagination into a coding project. The program also incorporates one-on-one mentoring for participating students.

"Our proposal was to help children and underserved communities, as we wanted to focus on both education and diversity, especially due to the growing concerns of the pandemic's impact on academic equity," said Sara Miskus, ACM-W student chapter president. "We wanted to make sure that underserved communities were getting those resources to explore STEM fields and make sure there is more diversity in engineering as a whole."

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ALUMNI AWARDS

South Africa's first female nuclear engineer, a military jet propulsion systems designer, one of the developers of the Materials Genome Initiative, a nationally renowned historic preservation expert and an entrepreneur enhancing the lives of disabled Ohioans are among the 21 recipients honored with 2020 Excellence in Engineering and Architecture Alumni Awards.



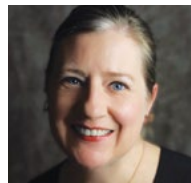
Stanley E. Harrison



Phil Combs



Sandra Harbrecht
Ratchford



Lee Ann
Schwope Cochran



John E. Allison



Linda Broadbelt



Nien-Yin Chan



Rick Freuler



Daniel Gallego-Perez



Dorota A.
Grejner-Brzezinska



Timothy M. Pinkston



Alan Blake



William Dawson



James T. Kienle



Allen M. Lo



Margaret Mkhosi



Raymond L. Nix



George Pantalos



W. Norm Shade



Seyed Madaeni



Ali Rahimi

Read more about the 2020 recipients' accomplishments and achievements:

go.osu.edu/be32g



ENGINEER WINS 2021 PRESIDENT'S PRIZE

Dominique Hadad, an industrial and systems engineering major, will receive a \$50,000 living stipend and up to \$50,000 in startup funding to launch her sustainability-focused consultation program for food-related businesses in the Columbus area.



For the full scoop, visit
go.osu.edu/be32n



FUELING THE NEED FOR SPEED

Did you know that the Voxan Wattman, the world's fastest electric motorcycle, is powered by a battery pack designed, fabricated and tested by engineering faculty and students at the Center for Automotive Research?



STUDENT COACHES HELP PEERS EXCEL

Martha Cibusu wouldn't be a chemical engineering major today without the support she received through the alumni-supported Academic Coaching in Engineering Program. It provides peer-assisted tutoring and supplemental instruction to help diverse and women students succeed.

A MAGNETIC FORCE AGAINST CANCER

A meeting of the minds between engineering and medicine at Ohio State has the potential to help improve future therapies and treatments for one of the most deadly forms of brain cancer—glioblastoma.



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