

# UMBC ACHIEVEMENTS



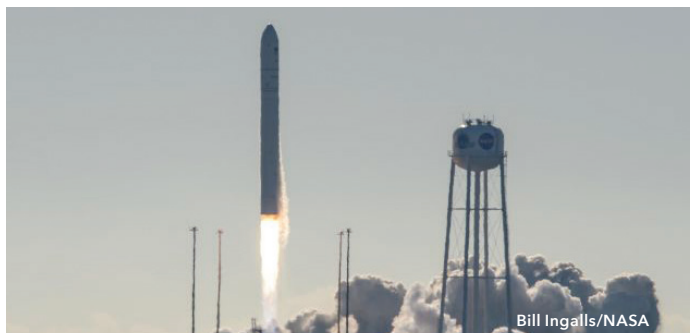
The University of Maryland, Baltimore County's commitment to innovative teaching, relevant research, and supportive community empowers and inspires inquisitive minds. UMBC combines the learning opportunities of a liberal arts college with the creative intensity of a leading research university, and is known globally for inclusive excellence. Retrievers come to UMBC from around the world to explore every angle of today's pressing questions, to reach together toward big breakthroughs, to claim their futures, and to extend beyond their comfort zones to have a far-reaching impact.

## RANKINGS

- *U.S. News & World Report* has again named UMBC a top national leader in both innovation and undergraduate teaching.
- *Times Higher Education* has recognized UMBC as one of the world's top universities, both broadly and in the life sciences, physical sciences, and psychology. *THE* also named UMBC #3 in the nation for social and economic impact.
- The *U.S. News Best Graduate Schools* rankings include numerous UMBC programs. Their Global University Rankings highlight UMBC's strength in geosciences and space science.
- *Princeton Review*, *Kiplinger's Personal Finance*, *Forbes*, *Money*, and the *Fiske Guide to Colleges* have named UMBC a "Best Value" university.
- UMBC is the nation's #1 producer of African American undergraduates who go on to complete an M.D./Ph.D. and #2 nationally for African American undergraduates who complete a STEM Ph.D.
- According to NSF, UMBC is among the country's top 150 universities in federal research and development expenditures and #13 in NASA funding. UMBC is among the top 30 in federal funding for social sciences as well as geosciences, atmospheric sciences, and ocean sciences.
- *The Chronicle of Higher Education* has named UMBC one of the "best colleges to work for" for a decade.

## INNOVATION IN TEACHING AND LEARNING

- UMBC's new Academic Success Center provides centralized support for undergraduates, including an Office of Academic Advocacy to help them tackle personal, academic, and financial challenges.
- UMBC received \$2.8 million from NSF to create an inclusive environmental science master's program focused on addressing the Baltimore Harbor's environmental challenges.
- NIH renewed the STEM BUILD program for \$12 million over five years. The program increases diversity in the biomedical sciences by determining effective, scalable ways to support STEM students from all backgrounds.
- The Chan Zuckerberg Initiative awarded \$6.9 million to replicate UMBC's Meyerhoff Scholars Program at UC San Diego and UC Berkeley, after successful HHMI-funded replications at Penn State and UNC-Chapel Hill.
- New UMBC students can now travel to the UK for two weeks before their first semester through Dawg Days Abroad, to build friendships, earn credit, do research, and learn what the UMBC community is all about.
- UMBC programs at the Universities at Shady Grove continue to expand, including, most recently, an undergraduate computer science degree.
- The Graduate School helps students make wise career prep choices as a founding partner in the Coalition for Next Generation Life Science and the Ph.D. Career Pathways study.
- UMBC's 130,000 square-foot Interdisciplinary Life Sciences Building opened in fall 2019. It's a new kind of teaching and research facility built to support creative, problem-focused collaboration across fields.



### We have liftoff!

NASA has launched the first UMBC-developed satellite into space to gather data on Earth's atmosphere. Scientists designed and built the Hyper-Angular Rainbow Polarimeter (HARP) in UMBC's Earth and Space Institute.

## RESEARCH AND CREATIVE ACHIEVEMENT

- UMBC faculty were awarded \$90 million in research support and had over \$80 million in R&D expenditures in FY19.
- Faculty research is supported by the NIH, NSF, NASA, NOAA, DOE, ONR, USDA, NEH, NEA, Andrew W. Mellon Foundation, Alfred P. Sloan Foundation, Google, IBM, Northrop Grumman, Cisco, GE Global Research, the State of Maryland, and more.
- Substantial grants supported work on topics such as advancing early treatment and identification of psychosis, developing the first 4D map of cellular signalling pathways, optimizing climate models, addressing environmental contaminants, and supporting first responders through stress-response technologies.
- Aaron Smith received an NSF CAREER Award and \$1 million NIH award for work on how biological systems take up and process iron, with important implications for human health.
- Emerging scholars received notable awards, including Nkiru Nnawulezi's Linda Saltzman New Investigator Award for research on gender-based violence and Mejdulene B. Shomali's Woodrow Wilson Foundation Career Enhancement Fellowship for work on femininity, queerness, and transnational Arab cultural production.
- Several UMBC scholars contributed to *Baltimore Revisited*, on the city's complex history and efforts to address inequalities, co-edited by Nicole King, Kate Drabinski, and a University of Baltimore colleague.
- The Kennedy Center invited UMBC to perform *In To and Out Of* by Anne Sofie Clemmensen, dance. *Girls on a Dirt Pile*, written by Susan McCully and directed by Eve Muson, theatre, appeared at the American College Theatre Festival.
- Sarah Stellwagen published the first-ever complete sequence of spider glue genes. After her work went viral on Reddit, her paper became one of the most popular in the journal's history.
- UMBC's Center for Accelerated Real Time Analytics is leading a \$3 million NSF partnership advancing computing hardware to solve infrastructure challenges, with partners like Seagate and Morgan Stanley.



### UMBC Cyber Dawgs are named national champions

UMBC's Cyber Dawgs won the U.S. Department of Energy's fifth annual national CyberForce Competition as well as the Maryland Cyber Challenge.

## STUDENT EXPERIENCE

**Student Enrollment (Fall 2019):** 13,602 (11,060 undergraduate, 2,542 graduate)

**Freshman Class Profile (Fall 2019):** 1,701; living on campus: 71%; average GPA: 3.89; average SAT: 1275 (two-part)

- UMBC students pursue applied learning in huge numbers, and these experiences have an impact: 87% of new grads head directly to a job, advanced degree, or both. Of those employed, a majority interned or worked for their employer as a student. Nearly 2,000 students interned in the most recent year (73% paid). Employers visited campus nearly 800 times, and over 3,300 students and alumni visited the Career Center for coaching.
- Students regularly receive highly competitive awards, recently including a Truman Scholarship, Newman Civic Fellowship, NASA graduate student fellowship, and numerous Fulbright awards.
- Mustafa Al-Adhami, M.S. '15, Ph.D. '20, mechanical engineering, won the national Three-Minute Thesis competition, presenting on his rapid bacterial-detection test that can assess, within an hour, if a patient has an infection.
- UMBC softball clinched the America East championship title for the first time in program history. Courtney Coppersmith '22, biochemistry and molecular biology, was the first player in America East history to be named Rookie of the Year and Pitcher of the Year in the same season.
- UMBC men's and women's swimming and diving were both crowned 2019 America East champions, shattering records along the way. Men's lacrosse brought home the America East title for the first time in a decade.
- UMBC Mock Trial continues to raise the bar, most recently placing 8th at the American Mock Trial National Championship Tournament, with Sydney Gaskins '21, political science, named All-American Attorney.
- Meyerhoff Scholar Jordan Troutman '21, computer science and mathematics, is the student commissioner for the Maryland Higher Education Commission for 2019 - 2020.

## COMMUNITY AND EXTENDED CONNECTIONS

- UMBC's K-12 partnerships continue to have a major impact, with Baltimore City partner schools celebrating impressive gains in math performance. UMBC also produces top K-12 educators, including alumni earning Teacher of the Year honors.
- The bwtech@UMBC Research and Technology Park houses 130 companies and organizations that employ nearly 1,800 people and have generated \$700M in labor income and business sales.
- UMBC leaders serve in prominent roles with groups such as the Association of Public and Land-grant Universities, GRE Board, Maryland Career Consortium, Maryland Juvenile Justice Reform Council, Maryland Association on Higher Education and Disability, National Association of College and University Business Officers, EDUCAUSE, and the National Academies.
- UMBC alumni serve as leaders at all levels, including Jerome Adams '97, M4, biochemistry and molecular biology, as U.S. surgeon general; Adrienne Jones '76, psychology, as speaker of the Maryland House of Delegates; and Letitia Dzirasa '03, M11, biological sciences, as Baltimore City health commissioner.
- AAAS selected UMBC to host a Dialogue on Science, Ethics, and Religion event focused on fostering conversations among scientific and faith communities.
- UMBC's international partnerships continue to grow. Programs vary widely, from TESOL exchanges with faculty in Sweden and Egypt, to collaboration in athletics, recreation, and the student experience with a Japanese sport science university.
- OCA Mocha opened as a full-service coffee shop and community meeting space in Arbutus, after starting as a class project focused on local community engagement.
- "Grit & Greatness: The Campaign for UMBC" has raised more than \$124 million toward UMBC's \$150 million goal.



### Strengthening bonds between campus and community

UMBC has earned the distinguished Community Engagement Classification from the Carnegie Foundation for the Advancement of Teaching. This honors UMBC's deep commitment to long-term community partnerships in the Baltimore region and beyond.

