RESEARCH AT UMBC

Innovation That Matters

ECONOMIC DEVELOPMENT
- UMBC’s Research & Technology Park – bwtech@UMBC – is home to three startups each named a 2017 Maryland Incubator Company of the Year, and comprises 525,000 square feet, houses over 135 tenants providing 1,600 jobs, and operates three incubators – for cybersecurity, life sciences, and clean tech.
- UMBC’s Express License Agreement reduces the burden for faculty to start a company.
- UMBC’s Technology Catalyst Fund provides early-stage support to advance innovations from faculty research.
- UMBC faculty are highly successful contributors to TEDCO’s Maryland Innovation Initiative (MII) – 27 projects awarded and 8 companies founded since 2013.

FAST FACTS
- The Carnegie Foundation classifies UMBC as a Doctoral University with Higher Research Activity
- Extramural Research Awards in FY 2017 – $98 Million
- Research Expenditures in FY 2017 – $78 Million
- Full-time Faculty – 533
- Student Enrollment in Fall 2017 – 13,662 (including 2,428 graduate students)
- Average Freshman GPA – 3.82
- 59 Majors, 40 Minors, and 23 Certificate Programs
- 24 Ph.D. Programs, 39 Masters Programs, and 24 Graduate Certificates

COLLABORATIVE RESEARCH CULTURE
- Vibrant, interdisciplinary, and collaborative, with a national reputation for integrating undergraduates in mentored research.
- Well aligned with regional and national priorities.
  - Environment, Health, National Security, and Education.
- Our most successful and impactful research efforts are often based on collaborations – across the campus, with other academic institutions, and with external partners.
NATIONAL RECOGNITION

• UMBC is ranked #7 among the Nation’s “Most Innovative Schools,” according to the 2018 Best Colleges Guide by U.S. News & World Report, joining Arizona State, Stanford, MIT, Harvard, and Duke in the Top Ten.

• UMBC is ranked #13 among National Schools providing the “Best Undergraduate Teaching,” according to the 2018 Best Colleges Guide by U.S. News & World Report, joining Princeton, Yale, and Berkeley in the Top 20.

COMMITTEE ENGAGEMENT

• UMBC is located just 15 minutes from Baltimore’s Inner Harbor and 30 minutes from Washington, D.C.

• UMBC is a dynamic public research university integrating teaching, research, and service to benefit the citizens of Maryland.

• UMBC emphasizes science, engineering, information technology, human services, and public policy at the graduate level.

KEY RESEARCH THEMES

Computer Information Sciences & Engineering
- Cybersecurity
- Health IT
- Cognitive Computing & Analytics
- Big Data

Environmental Sciences & Engineering
- Atmospheric Physics & Remote Sensing
- Life Sciences & Biotechnology
- Bio Sciences & Engineering
- Ecology & Remediation
- Marine Biotechnology
- Policy Studies
- Intercultural Communications

HONORS & AWARDS

National and International Recognition
- UMBC Faculty have received 34 NSF CAREER Awards since 1995 – including three in 2017: to Tinoosh Mohsenin and Ting Zhu in Computer Science & Electrical Engineering (CSEE), and to Lee Blaney in Chemical, Biochemical & Environmental Engineering (CBEE).
- 2017 Connected World Pioneer Award – Govind Rao, Center for Advanced Sensor Technology (CAST)
- 2017 Guggenheim Fellowship – Deborah Rudacille, English
- 2016 National Academy of Sciences Member – Michael Summers, Chemistry & Biochemistry
- 2016 Berlin Prize Fellowship – Kate Brown and Rebecca Boehling, History
- 2016 EUI Fernand Braudel Senior Fellowship – Marjoleine Kars and Kate Brown, History

MEANINGFUL PARTNERSHIPS

UMBC/NASA Partnership
- Three major Cooperative Agreements with NASA Goddard Space Flight Center
- Ranked among Top 20 U.S. Universities in NASA funding

UMBC/UMB Partnership
- Joint Degree Programs
- Graduate Program in Biochemistry & Molecular Biology
- Ph.D. Programs in Gerontology and in Biostatistics
- Dual-Campus School of Social Work
- Research & Innovation Partnership Seed Program
- Shared Research Facilities

UMBC/MITRE Partnership
- Academic Partner Institution on NIST National Cybersecurity Center of Excellence FFRDC

UMBC/Downtown Baltimore Partnership
- Institute for Marine & Environmental Technology (IMET)
- 2015 Imagining America National Conference
- 2016 and 2017 Light City Baltimore

research.umbc.edu