

Who we are, what we do, why it matters



University of Missouri-Columbia
www.missouri.edu

The landscape of higher learning in America is vast and varied. A topography of choices, from large to small, public to private, and a host of specialties, awaits every student seeking a college degree. Distinct missions add color and texture to the terrain, and levels of access give it depth. Each institution — from community colleges to the highly selective Ivy League — plays a role in educating the public.

Where does MU fit into this picture? It's a land-grant institution, a member of the Association of American Universities (AAU), a public research university and a school classified as comprehensive doctoral with medical/veterinary by the Carnegie Foundation for the Advancement of Teaching. These indicators identify Mizzou as one of the summits in the landscape of higher learning, but what do they actually mean? To answer that question, here's a view from the top.

Built to Serve: The Land-grant Tradition

Today's students would barely recognize the university of the early 19th century. Established in 1839, the University of Missouri consisted only of what would later become the College of Arts and Science. It followed the English model of education, where isolated institutions staffed by clergy taught philosophy, religion, law, medicine and literature to well-heeled young men who learned through memorization and recitation.

In 1862, President Abraham Lincoln signed the Morrill Act, providing for the donation of public land to the individual states. Funds from the sale of

*Grounded
in teaching,
research and
service, MU
stands at the
peak of the
national higher
education
landscape.*

1636

The first institution of higher education in the British North American colonies, Harvard College, is established in Cambridge, Mass. Throughout the 1600s and 1700s, universities follow the English model's emphasis on general education in the classics, the humanities, religious instruction and morality.

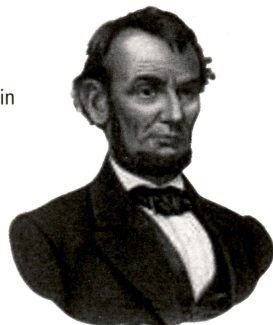


1752

Experimenting with a key tied to a kite, Benjamin Franklin discovers that lightning is a form of electricity.

1839

The Geyer Act establishes the University of Missouri in Columbia. It is the first publicly supported higher education institution west of the Mississippi River.



1862

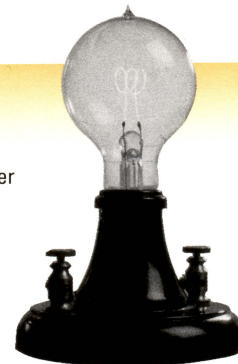
President Abraham Lincoln signs the Morrill Act, which creates the nation's land-grant universities.

1870

The University of Missouri gains land-grant status under the Morrill Act and founds the College of Agriculture in Columbia and a School of Mines and Metallurgy in Rolla.

1879

Thomas Edison invents the carbon filament light bulb.



Late 1800s

American universities begin to follow the German model's focus on scientific research and advanced study.

1873

MU lecturer and Missouri State Entomologist Charles V. Riley helps save the French wine industry from a vine-ravaging aphid by grafting resistant Missouri rootstock onto French vines.



The Company We Keep: Public AAU Members

LISTED BY YEAR OF MEMBERSHIP

University of California, Berkeley, 1900
 University of Michigan, 1900
 The University of Wisconsin-Madison, 1900
 University of Virginia, 1904
 University of Illinois at Urbana-Champaign, 1908
 University of Minnesota, Twin Cities, 1908
 University of Missouri-Columbia, 1908
 Indiana University, 1909
 The University of Iowa, 1909
 The University of Kansas, 1909
 University of Nebraska-Lincoln, 1909
 The Ohio State University, 1916
 The University of North Carolina at Chapel Hill, 1922
 The University of Texas at Austin, 1929
 University of Washington, 1950
 Iowa State University, 1958
 The Pennsylvania State University, 1958
 Purdue University, 1958
 Michigan State University, 1964
 University of Colorado at Boulder, 1966
 University of Maryland, College Park, 1969
 University of Oregon, 1969
 University of California, Los Angeles, 1974
 University of Pittsburgh, 1974
 University of California, San Diego, 1982
 The University of Arizona, 1985
 University of Florida, 1985
 Rutgers, The State University of New Jersey, 1989
 The State University of New York at Buffalo, 1989
 University of California, Santa Barbara, 1995
 University of California, Davis, 1996
 University of California, Irvine, 1996
 The State University of New York at Stony Brook, 2001
 Texas A&M University, 2001

these “land grants” were to be used to create institutions to teach agriculture and the mechanic arts to the American masses.

“A major goal of the Morrill Act was to enhance the curriculum to help farmers with their crops,” says Vicki Rosser, assistant professor of educational leadership and policy analysis. “It established a social commitment to our surrounding communities.”

Missourians chose to apply their land grant funds to the existing state university by establishing the College of Agriculture on the Columbia campus and a new School of Mines and Metallurgy in Rolla. At MU, this decision effectively created two universities in one: a land-grant institution for all citizens of the state and an intellectual center to advance liberal arts scholarship.

“Providing access is a key part of our mission, and we do that in many different ways, including targeted scholarships and recruitment,” says Ann Korschgen, vice provost for enrollment management. “At the same time, given the nature and breadth of the academic experience that we offer at MU, we believe that our University should be the destination for the best student scholars in the state.”

Subsequent legislation in the early 20th century provided more support for land-grant universities and mandated that they share their knowledge with the public — the underpinnings of University of Missouri Extension, headquartered at MU.

Today, through statewide offices, publications and Web-based services, extension faculty still help farmers, but they also teach families about nutrition, educate youth through 4-H programs, guide entrepreneurs as they start new businesses and help the state’s growing immigrant populations through community programs.

“As the needs of the state change, we respond with education to address those needs,” says L. Jo Turner, interim vice provost and director of extension.

1890

Congress passes a second Morrill Act, which creates what are now known as historically black universities and provides more support to land-grant institutions.



1900

Fourteen universities, including Cornell, Stanford and Yale, create the Association of American Universities (AAU) to provide standards for doctoral programs. They establish modern

American higher education’s emphasis on undergraduate education and research.

1903

The Wright brothers make the world’s first successful airplane flight.

1910

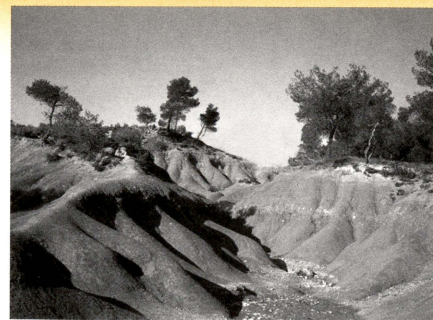
University of Missouri Extension begins spreading the benefits of University research to the citizens of Missouri.

1911

Psychology faculty member Max Meyer publishes the first psychology text to make an empirical link between psychology and physiology.

1914

Walter Williams, dean of MU’s School of Journalism, writes *The Journalist’s Creed*, a standard for practicing professional journalism that stands the test of time.



1917

MU scientists are the first to conduct soil-erosion research. Their work prompts Congress to create experiment

stations nationwide to develop techniques of restoring eroded land and dealing with droughts.

In Good Company: AAU Membership

In the late 19th century, the modern university was born. At Mizzou, the scope of academic programs continued to broaden with new, specialized schools and colleges. Because there was no national regulating body or system of accreditation in place at the time, standards of graduate education varied drastically. To solve this problem, leaders of some of the nation's best universities established the AAU in 1900.

Member institutions combined a commitment to first-rate undergraduate education with the goals of pioneering research and outstanding graduate programs. MU joined the organization in 1908 and is the only public AAU member in the state. The private member in Missouri is Washington University in St. Louis.

Today, the AAU includes 62 members, 34 of which are public universities. Membership is by invitation only and can be revoked if the organization's monitoring committee finds that a member institution has fallen behind in generating federal research funding or attracting nationally recognized faculty members. In recent years, MU has led all AAU public universities in federal grant growth.

Provost Brian Foster says AAU membership establishes MU's academic credentials. "AAU universities meet rigorous standards that are recognized by other institutions," he says. "That helps us attract top faculty, staff and students who ensure that MU's instructional and research programs are of the highest quality."

A National Resource: The Public Research University

As scientific and technological discoveries began to transform life in the 20th century, the federal government began to recognize the potential for innovation at the nation's universities. American research universities such as Mizzou became the primary research and development centers for the federal government, which created agencies including the National Science Foundation (NSF) and the National Institutes of Health (NIH) to fund research.

In 2005, externally supported funding for research and related activities at MU increased by 10 percent to nearly \$180 million. James Coleman, vice provost for research, attributes MU's growth to strategic investments in specific programs.

Coleman points to the Food for the 21st Century program as an example. By directing funds to enhance Mizzou's reputation for leading research in plant biology and animal sciences, the University was able to recruit professors such as Randall Prather, whose groundbreaking research on pig genetics and reproduction helped to recently attract more than \$10 million in NIH grants to support NIH's National Center for Swine Research and Resources.

"By creating pockets of excellence, we set the bar higher for everyone across campus," Coleman says.

External support for University research has helped MU become a powerful force for economic growth in Missouri. During the previous fiscal year, for example, MU's \$220 million in research and development spending generated some \$440 million in economic activity and supported close to 9,000 jobs.

1927

MU geneticist Lewis J. Stadler discovers that radiation multiplies mutations in plants, a breakthrough that leads to faster development of new varieties of plants.



1945

With the end of World War II, the U.S. federal government realizes the need for scientific and technological research at its best universities. At MU, William Albrecht collects a soil sample from Sanborn Field that provides the golden mold used to make the penicillin-like drug Aureomycin.

1950

Congress creates the National Science Foundation, which awards federal funds to researchers at the nation's top institutions.

1952

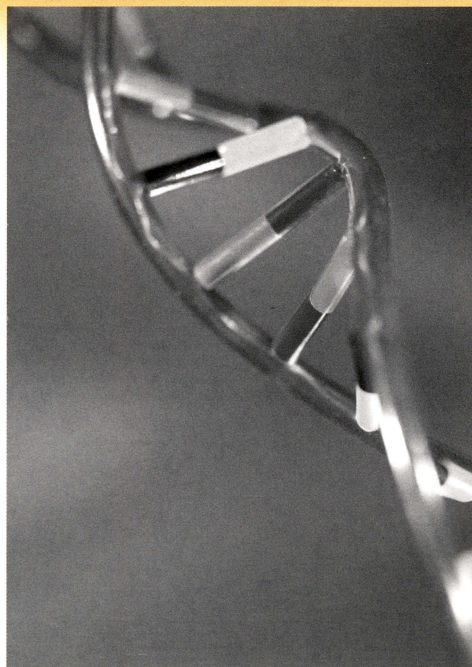
Jonas Salk successfully inoculates volunteers with the polio vaccine.

1953

Francis Crick and James Watson create the first visual model of DNA.

1950s

Research by MU geneticist Ernie Sears, a member of the National Academy of Sciences, and his wife, geneticist Lotti Sears, helps create a strain of wheat that is resistant to rust disease and is later used as a food source worldwide.



1957

The Soviet Union initiates the Space Age with the successful launch of Sputnik I, the world's first artificial satellite.

1963

The University of Missouri, which already included campuses in Columbia and Rolla, becomes a four-campus system by acquiring the University of Kansas City and creating another campus in St. Louis. The Columbia campus remains the largest and most comprehensive in the UM System.

Our Defining Qualities

Land-grant institution

Extension specialists in every county of Missouri continue Mizzou's historic, federally mandated mission to carry the benefits of University research beyond campus.

AAU member

For nearly 100 years, MU has been the only public university in the state to belong to the prestigious Association of American Universities. Membership recognizes excellence in teaching and research and includes only the nation's top-tier institutions.

Public research university

Federal funds pay for groundbreaking research at MU, and the benefits of that research extend across the nation and around the world.

Carnegie comprehensive doctoral with medical/veterinary

Mizzou is classified among the American universities that offer the most educational opportunities and the highest level of instruction. These schools prepare the nation's future professionals and attract faculty who not only teach in the classroom but also advance scholarship through research and innovations.

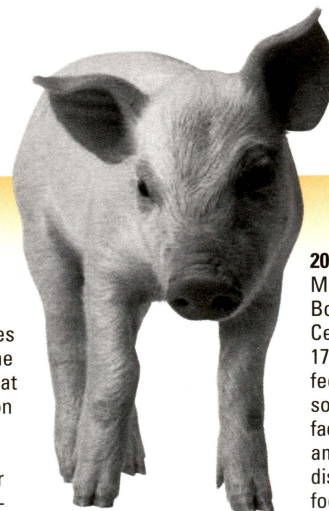
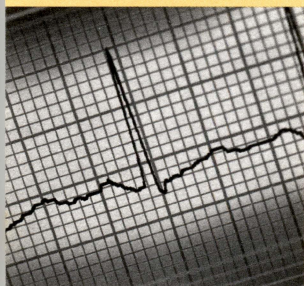
A Spot at the Top: The Carnegie Classification

In 1973, the Carnegie Foundation for the Advancement of Teaching published its first *Carnegie Classification of Institutions of Higher Education*, a resource that categorizes institutions for research purposes. Researchers use it to compare individual schools with others that have similar characteristics.

The Carnegie classification is not a ranking system, but it does characterize individual institutions by the company they keep. MU is classified as both a balanced arts and sciences with professions and a comprehensive doctoral with medical/veterinary. That means it offers a wide range of undergraduate programs and demonstrates a commitment to graduate education at the highest level, granting at least 50 doctoral degrees per year in at least 15 disciplines. Schools in this category include Harvard, Princeton, the University of Iowa, the University of Michigan and Northwestern University.

U.S. News & World Report uses the Carnegie classification to organize its annual college rankings, and some grant agencies use the classification to guide funding decisions. But the most important role of the classification is in recruiting and retaining faculty.

"It means that we have an environment in which faculty can spend a great deal of their time creating new knowledge and still fulfill a desire to teach in the classroom," Coleman says. "Designations like this indicate that we have a critical mass of excellence here. They paint a picture of the kind of university we are."



1966

MU completes construction on its world-class Research Reactor Center, which focuses on nuclear medicine research, including medical diagnostic tools and radiopharmaceuticals.

1970

MU scientist John C. Schuder develops the first automatic and completely implanted defibrillator for the human heart.

1973

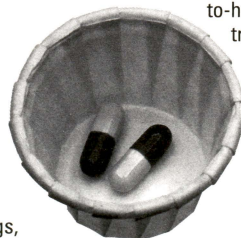
The Carnegie Foundation for the Advancement of Teaching publishes its first classification of American colleges and universities, grouping schools together by the number and scope of their degree programs. MU is grouped among the nation's best universities that confer the most doctoral degrees and conduct the most federally funded research.

1982

MU pediatric cardiologist Zuhdi Lababidi performs the world's first pediatric angioplasty, which corrects aortic valve stenosis in newborns.

1999

MU chemists Jerry Atwood, Leonard Barbour and William Orr publish research that paves the way for better electronic devices and "smart" drugs, which deliver treatment to cells that need it.



2002

MU's Randall Prather, along with Immerge BioTherapeutics, clones the first miniature swine with a specific gene that causes human rejection "knocked out" of their DNA. The feat takes scientists a step closer to the possibility of pig-to-human organ transplants.

2003

A team of MU researchers led by Professor Wynn Volkert wins a \$10 million grant from the National Cancer Institute to create a cancer imaging center to foster new methods of cancer detection and treatment.

2004

MU's Christopher S. Bond Life Sciences Center is dedicated Sept. 17. With funding from federal, state and private sources, the new center facilitates collaboration among faculty across disciplines to improve food, health and the environment.

2006

World-renowned cancer researcher M. Frederick Hawthorne and MU Professor Kattesh Katti become co-directors of a new center to research cancer treatments using nanotechnology.

University Libraries
University of Missouri

Digitization Information Page

Local identifier WhoWeAre

Source information

Format	Book
Content type	Text with images
Source ID	Duplicate gift copy not added to collection.
Notes	

Capture information

Date captured	April 2019
Scanner manufacturer	Fujitsu
Scanner model	fi-7460
Scanning system software	ScandAll Pro v. 2.1.5 Premium
Optical resolution	600 dpi
Color settings	24 bit color
File types	tiff

Derivatives - Access copy

Compression	Tiff: LZW compression
Editing software	Adobe Photoshop CC
Resolution	600 dpi
Color	color
File types	pdf created from tiffs
Notes	
