

# UNIVERSITY — FOR — MISSOURI

■ **Chancellor Alexander N. Cartwright's bold vision for Mizzou prioritizes innovative, hands-on student learning; embraces strategic investments in collaborative research and creative initiatives; and grows the university's community engagement to maximize societal impact. Story by Gordy Sauer**



CLOCKWISE FROM TOP LEFT: KYLE SPRADLEY; ROB HILL; RACHEL COWARD; JIM YATES; NICHOLAS BENNER; SHANE EPPING; NICHOLAS BENNER

**B**ack in 1839, when 900 Boone County citizens asked the General Assembly to establish the University of Missouri in Columbia, they rallied around a brand of education that would grow into today's mission centered on accessibility, societal impact and excellence. Now in his second year at the university, Chancellor Alexander N. Cartwright is reaffirming that mission.

"We are Missouri's flagship university — a comprehensive, land-grant institution that's a leader in agriculture and science as well as the arts and humanities," Cartwright says. "We are a university that's accessible to the people of the state, extending knowledge out and learning from the communities that invest in us. And we have a responsibility and a passion to do even more."

Cartwright's vision for Mizzou builds on the university's strengths while charting a path to the future that embraces change. Through data-informed decisions and a focus on measurable outcomes — from graduation rates to economic impact, enrollment to employee satisfaction and everything in between — Cartwright is redefining excellence when it comes to addressing three of Missouri's

most critical needs: the economy, education and health care.

The chancellor's platform for growth includes initiatives focused on student success, research, creative works and engagement. It's a challenge Cartwright is ready to tackle.

"The world around us is changing more rapidly than universities are accustomed to," he says. "We are ready at Mizzou to up our game and focus on the future state of higher education. We can make the university a leader in that landscape and a resource for all."

With world-class faculty and staff whose research and teaching impact many, and as the only public institution in Missouri that's a member of the prestigious Association of American Universities (AAU), Mizzou is already a global contributor to knowledge, the economy and solutions to the world's grand challenges. But Cartwright emphasizes that only by becoming a better steward of tax dollars and providing opportunities that reflect today's dynamic needs will the university fulfill its responsibility — one dedicated to the long-term public good.

"Our job is to foster the educational, cultural and research distinction of this great state," Cartwright says. "Universities are about people — students, alumni, faculty, staff and those living in the many communities we impact. Together, we can enable the vision of us not just being the University of Missouri but the University *for* Missouri."

Clockwise from top left: The Raptor Rehabilitation Project heals injured birds; Mizzou's iLab makes the classroom a 3D virtual world; a new graduate poses for the perfect photo; today's KOMU student news anchors become tomorrow's journalists; undergraduate researchers work alongside Zhanyuan Zhang, research professor in the Division of Plant Sciences; graduate student Eimear Arkins has toured Europe and the U.S. performing traditional Irish music; fireworks explode over Memorial Union; Cartwright stands beneath Memorial Union's arch; Academic Hall, pictured before the 1892 fire that destroyed all but the Columns.





■ AMPLIFYING STUDENT EXCELLENCE

Affordability, accessibility and hands-on learning are Cartwright's pillars of student success.



↑ During Micheala Sosby's semesterlong NASA co-op, she took her Mizzou education to universal proportions, helping relay NASA's mission to American households.

Although worlds away from Missouri, outer space is just another part of the job for Mizzou's Micheala Sosby, BJ '16. In spring 2018, she participated in a co-op at NASA through the Crosby MBA program. Combining her undergraduate journalism degree with her graduate business experience, Sosby helped NASA with communication and public relations work. Her hands-on educational venture exemplifies the Missouri Method of learning by doing.

Expanding experiential learning and offering numerous pathways for students to achieve their educational goals is integral to Chancellor Cartwright's vision for student success. Whether in agriculture, medicine, music, journalism, teaching or business, the widespread availability of hands-on learning experiences makes Mizzou more responsive to students, giving them a competitive edge both in the workforce and in advanced studies.

"Our job is to provide students with the best and most dynamic learning opportunities we can," Cartwright says. "The career landscape is changing, and we are creating a multifaceted educational environment that prepares students for that."

Mizzou will create a Teaching for Learning Center to guide its efforts in developing innovative teaching methods. The center will build on and collaborate with MU's Campus Writing

Program, Educational Technologies, and other teaching and curricular initiatives. Among these, Cartwright is creating a one-stop shop for student services, including comprehensive career support to help students take advantage of the extensive opportunities available to them. He's also partnering with the Mizzou Alumni Association to establish the Mizzou Mentoring Program, which will help students build their professional networks.

"We have to prepare each of our students to be adaptable to the jobs of tomorrow — including those that haven't been identified yet," Cartwright says.

Cartwright's plans will supplement steps Mizzou has already taken to ensure Mizzou students excel, such as Freshman Interest Groups, which offer new students a collaborative living and learning community to facilitate their transition to college, and the Peer Undergraduate Mentoring Program, which pairs first- and second-year undergraduates with third- and fourth-year students to enhance academic success. Most importantly, expanding the educational experience and offering flexible paths to learning will increase student retention and graduation rates while lowering costs and other higher education burdens. In this way, students can succeed by focusing on why they are here: their education.



## USING THEIR HEADS AND THEIR HANDS

† An interdisciplinary team of Mizzou students from occupational therapy, physical therapy and engineering collaborate with faculty to customize an electrically powered toy car for a child. Through a hands-on learning program called Go, Baby Go!, their goal is to improve the lives of children with limited mobility.



## BEYOND THE CLASSROOM

Mizzou is full of exceptional students doing exceptional work. **Ransford Pinto**, a Ghanaian doctoral student in the College of Education, teaches in Mizzou K-12. The program offers students around the world access to online courses for high school credit. After graduation, Pinto wants to take his Mizzou education and experiences back to Ghana. Also pictured is journalism student **Allison Pecorin**, who was named the 25th David Kaplan Fellow and earned a paid internship at the ABC News Washington, D.C., bureau during spring 2018.



## MORE THAN A GPA

From college tenures to career placement, Mizzou students are at the top of their class.

# 1.7 million

Hours Mizzou students served in the community in 2016

# 4.2 years

Average time to graduate for a Tiger, a figure that beats both national and state averages

# 20

Percentage of Mizzou undergraduates who study abroad through 275 programs in 48 countries

# 90.4

Percentage of 2016–2017 Mizzou graduates with bachelor's degrees who found work, continued their education, volunteered with a service organization or enlisted in the military

## CUTTING COSTS



Mizzou students borrow 25 percent less than the national average to pay for college, and several of Chancellor Cartwright's new programs and initiatives show his commitment to increasing affordability and reducing debt at graduation:

☀ The **Missouri Land Grant compact** covers tuition and fees for full-time Pell Grant-eligible Missouri residents who qualify for admission.

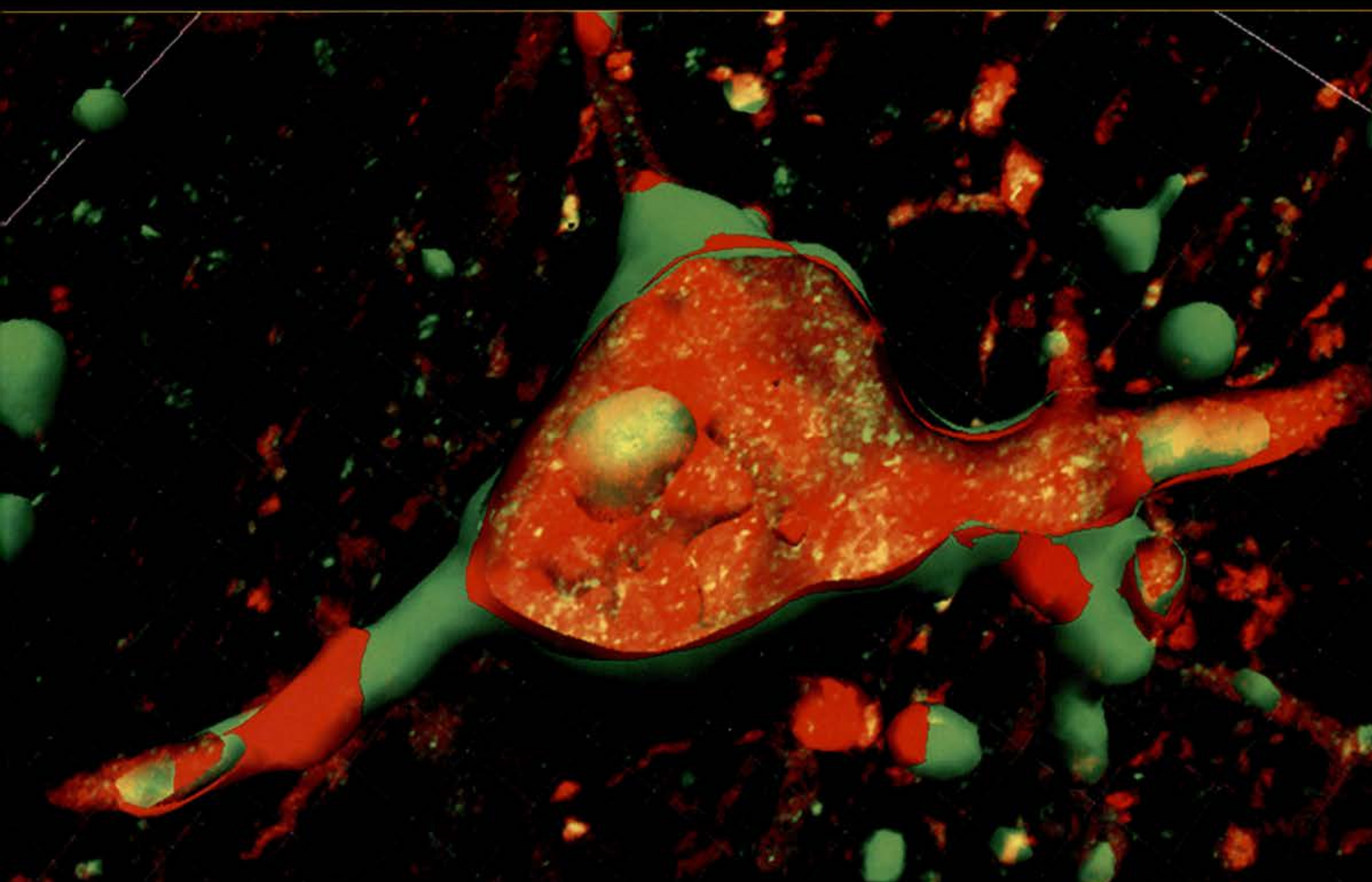
☀ As **Border State Scholars**, qualifying students who live in one of Missouri's eight border states receive tuition discounts.

☀ The **Black & Gold Scholarship** reduces tuition for out-of-state legacy students with ACT scores of 25 or higher.

☀ The **ROTC Scholarship** covers freshman-year room and board for ROTC students who are winners of a national scholarship from the Army, Air Force, Navy or Marines.

☀ **Open Educational Resources** expand access to free or low-cost textbooks and other educational materials campuswide.

☀ A **3.5 percent reduction in room and board** is one of many cost-cutting measures.



## ■ INVESTING IN DISCOVERY

Strategic investments and increased collaboration will help Mizzou make the life-changing breakthroughs it can.

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† Equipped with laser technology and capable of super-resolution imaging, Mizzou’s Molecular Cytology Core captures this 3-D rendering of a neuron producing two neurohormones, shown in green and red, to illuminate how brain networks regulate stress and social behavior.

s one of only 62 universities in the AAU and as an institution securing more than \$250 million in research funding this past year, the University of Missouri is poised to solve the world’s pressing problems. To better meet those challenges, Chancellor Cartwright and his team have prepared an accelerated plan to double research expenditures during the next five years. Strategic investments will further cement Mizzou’s contributions to science, technology, arts, humanities, medicine and agriculture. That level of investment will position Mizzou as a global innovator in driving economic growth and discovery.

“With the quality and breadth of our faculty’s research and technologies like our Molecular Cytology Core, we are developing solutions to the world’s grand challenges,” Cartwright says. “Doubling our external research funding will allow us to support pioneering work that contributes so much to society in Missouri and beyond in areas such as human health, food, education and energy.”

For Cartwright, becoming the University *for* Missouri means understanding how the universi-

ty’s research helps others around the world. It also means leveraging Mizzou’s strengths as a comprehensive university to enhance discovery through collaborative efforts. “One of the most powerful ways we can thrive as a university is by creating research opportunities and spaces that bring a broad range of thinkers together,” he says.

In February 2017, Cartwright announced several initiatives to grow research and creative works that will enable Mizzou to attract research funding and promote faculty scholarship on a global scale — all of which help the university broaden its societal impact.

Mizzou has internationally recognized faculty across the arts and sciences who work in top-ranked programs and centers. But for the university to continue to evolve, Cartwright stresses that the people responsible for outstanding scholarship, teaching and economic development need to collaborate more than ever, taking chances and thinking creatively.

“That sounds a lot like Mizzou to me,” Cartwright says.



## NEW FACILITIES, NEW POSSIBILITIES

Visible changes are happening at Mizzou, with new projects designed to provide faculty, staff and students the space and resources needed to fulfill their potential. One of MU's — and the University of Missouri System's — most exciting developments in the works is the Translational Precision Medicine Complex. The project, estimated at \$150 million to \$200 million, will align researchers and clinicians in a multidisciplinary setting supported by advanced technology and data-analysis tools. This “bench-to-bedside” model accelerates the development of novel diagnostic tools and treatments, fast-tracking medical applications in clinical settings. Other developments underway or completed include a \$5 million research and training facility for the Thompson Center for Autism and Neurodevelopmental Disorders, a \$30 million Plant Growth Facility and a \$10 million School of Music building.



↑ The Translational Precision Medicine Complex will be a leading center of discovery and a significant public-private partnership that ensures the university and its people are equipped to move research innovations quickly from lab to market.

## WORKING (AND THINKING) TOGETHER

### New initiatives will bolster success in research and creative works:

- ☀ An Artist in Residence program will bring celebrated artists and creative thinkers to campus to work with students, faculty and staff.
- ☀ The Office for Research Advancement will provide Mizzou's faculty and staff with assistance in pursuing large grants and other support to help them succeed on a global scale.
- ☀ The proposed College of Interdisciplinary and Graduate Studies would provide greater support for collaborative scholarship and research, strengthening recruitment, enrollment and other critical functions that enable graduate students to thrive — whether in the classroom or the lab.
- ☀ An annual Mizzou Innovates competition will engage students, faculty, staff and alumni in conducting research to solve some of Missouri's grand challenges. A symposium will be held following the research projects to present and discuss some of the proposed solutions.



## LEADING THE WAY

# 16

Number of Mizzou faculty members in national academies of inventors, medicine and sciences



James Birchler, Biological Sciences

# 7,000+

Number of articles published by faculty in the past three years

# 400+

Number of major national and international awards that faculty have received

# 500

Number of Mizzou undergraduate students who participate in research each year





■ RESPECTING ITS ROLE, FULFILLING ITS RESPONSIBILITY

Thinking locally increases Mizzou's community engagement and helps broaden its societal impact — in Missouri and across the globe.

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† Missouri farmers listen to an educational presentation at MU Extension's 2017 Graves-Chapple Research Center Field Day, where topics ranging from herbicide injury to nitrogen application support the growth and success of Missouri's agricultural industry.

hancellor Cartwright believes the university has a duty to give back to the communities it serves through responsible and committed stewardship. To accomplish this, he and Marshall Stewart, vice chancellor of extension and engagement and the University of Missouri System chief engagement officer, focus on helping Mizzou address societal needs by thinking and acting more locally. They have established the All Things Missouri interactive website and formed the Engagement Council, which will use data insights to reach more people with more relevant information and opportunities. They also set up the IMPACT website ([engagements.missouri.edu](http://engagements.missouri.edu)) so that Missourians in every county can find and access the numerous programs MU Extension offers.

"We owe it to Missourians to be good stewards of the priceless resources they invest in us," Cartwright says. "The university has the knowledge and resources capable of serving people around the globe. But the issues facing Missouri's citizens and communities are local. That's why our people and our state-wide network of extension centers tap the knowledge and expertise particular to those local needs,

helping us best serve Missouri and Missourians."

Mizzou has a strong foundation of comprehensive engagement. Continuing education programs, such as training courses for Missouri civil servants, highlight Mizzou's economic contributions to the state. Extension programs, such as the Missouri 4-H Center for Youth Development, and student-driven programs, such as Mizzou Alternative Breaks, which sends over 600 student volunteers a year on service trips across the globe, illustrate the university's reach.

With the All Things Missouri website, the university leverages connections, research and knowledge across Missouri as it recommits to its community-based roots. By collaborating with rural and urban communities on economic development issues and undertaking efforts that reflect the diverse and evolving needs of today's citizens, Mizzou combats some of the state's most pervasive problems, such as rural access to health care.

Although the university's main campus is only 1,262 acres, Cartwright believes Mizzou's reach is limitless — and its impact as hard-working and reliable as the Show-Me State.

A HEALTHY MISSOURI



Individual, family and community health are at the core of MU Extension. Improvements in health care access through the Springfield Clinical Campus and nursing outreach programs directly impact rural Missourians' well-being. Other initiatives in, for example, veterinary medicine and community health and safety allow the state to best serve its citizens. The Fire and Rescue Training Institute helps safeguard every Missouri community, the Law Enforcement Training Institute ensures a protected and equitable environment for all, and continuing veterinary education bolsters the health of Missourians' most loyal companions and valuable commodities. The charge of upholding the health of citizens and communities means thinking beyond a visit to the doctor, and through MU Extension, Mizzou meets that responsibility.



Tama Franklin, BA '87, MD '94, works with MU School of Medicine student Collyn Schafer in her clinic in Springfield, Missouri.

BEEF IT UP

Now celebrating its 20th anniversary as a nationally recognized model for translational research, the Show-Me-Select Replacement Heifer Program gives Missouri beef producers the tools to increase herd production and profitability, generating an economic impact of more than \$150 million.

COMPREHENSIVE ENGAGEMENT

**Environmental concerns:** From a soil and plant testing laboratory to a Master Gardner program to a project that helps women farmers become better business partners, MU Extension is committed to the fabric of the state and the industry that brings in \$2 billion annually — agriculture.

**Educational attainment:** Education is at the heart of Mizzou, and learning extends beyond the campus borders to all citizens: 20 percent of Missouri youth participate in a 4-H program. Recent graduates counsel students in high schools statewide through the Missouri College Advising Corps to boost the number of underrepresented individuals who attend and complete college. Missourians and others around the country can even take online courses, such as How to Get an A in Retirement.



**Community, economic, business and workforce development:** For every dollar Missourians invest in MU Extension, the university creates an \$11 return on investment. This past year, 1.3 million Missourians saw the impact of Mizzou engagement, including a \$200 million boost in sales for Missouri businesses; the creation or retention of 8,000 jobs; and programs such as the Community Arts Program. But the university's impact on communities, businesses and the economy reaches beyond the state: The Mid-America Trade Adjustment Assistance Center helps manufacturers around the Midwest remain competitive against domestic and global imports.

REAL DOLLARS, REAL EFFECTS

2.33 million

Grants, resources or efficiencies acquired by Missouri communities and organizations through MU Extension in FY 2017

11,000

Emergency responders in Missouri trained by MU Extension in FY 2017

1,626

MU-trained physicians practicing in Missouri in 2018

2.1 million

Annual economic impact per physician

80 million

Annual savings across 2,000 Missouri crop producers through MU Extension's Integrated Pest Management Plant Protection for the 21st Century

13.7 million

Dollars raised in March during Mizzou Giving Day

1 billion

Fundraising total to date in the Mizzou: Our Time to Lead campaign