Knowledge Enterprise Development advances research, innovation, strategic partnerships, entrepreneurship and economic development at ASU, in Arizona and globally.
ASU is the fastest growing research enterprise among universities with more than $100 million in research expenditures.

Rankings

**#10**
for total research expenditures among institutions without a medical school

**#3**
for earth sciences, ahead of Stanford, Berkeley and MIT

**#4**
for transdisciplinary sciences, ahead of Northwestern, MIT and UCLA

**#5**
for social sciences, ahead of Berkeley, Cornell and UCLA

**#8**
for electrical engineering, ahead of UT Austin, Stanford and Carnegie Mellon

**#10**
for HHS (including NIH)-funded expenditures among institutions without a medical school

**#11**
for NASA-funded expenditures

**#12**
for humanities, ahead of Harvard, Berkeley and Princeton

*(National Science Foundation HERD Survey FY 2015)*
For an unprecedented second straight year, ASU has been recognized by U.S. News & World Report as the country’s “most innovative” school, ahead of #2 Stanford and #3 MIT. ASU is where students and faculty work with NASA to develop and advance innovations in space exploration. This is where Nobel laureates and Pulitzer Prize winners teach master learners. ASU’s nationally ranked programs inspire the top-qualified graduates, according to professional recruiters and rankings services around the world. This is where next-generation innovators learn to thrive.
Entrepreneurial spirit

At ASU, entrepreneurship is more than a single class or program – it is a mindset that is woven into the fabric of the entire university. ASU’s approach to entrepreneurship and its success throughout the Greater Phoenix region was recognized in 2016 through:

- $3.8 million in new grant funding to support student, faculty and Main Street entrepreneurs in our community, from organizations such as the Kauffman Foundation, JPMorgan Chase Foundation, National Science Foundation, Silicon Valley Community Foundation, Verizon Foundation and U.S. Economic Development Administration
- The Outstanding Achievement as an Entrepreneurial University at the Deshpande Symposium on Innovation and Entrepreneurship in Higher Education
- The Outstanding Contribution to Venture Creation award from the Global Consortium of Entrepreneurship Centers

The Walter Cronkite School of Journalism and Mass Communication at ASU is serving as a first-of-its-kind testbed for Google News Lab to evaluate new tools and encourage their use in journalism education.

NeoLight, a company founded by former ASU students, won the Rise of the Rest – Phoenix startup pitch competition, receiving $100,000 from AOL co-founder Steve Case. NeoLight is a medical device company that designs phototherapy-based technologies to treat jaundice in newborns.
ASU advances health care delivery through education and research partnerships with leading medical providers, including:

Mayo Clinic
Dignity Health
Barrow Neurological Institute
Banner Health
Phoenix Children’s Hospital
Maricopa Integrated Health System
Mountain Park Health Center
HonorHealth
VA Health Care
IASIS Healthcare

Mayo Clinic, the world leader in patient care, education and research, and ASU, the nation’s most innovative university, are bringing together the brightest minds to improve patient care, transform medical education and accelerate cutting-edge research through the Mayo Clinic and Arizona State University Alliance for Health Care. The Mayo Clinic School of Medicine and ASU have developed a novel curriculum in the science of health care delivery. This will also be available to students at the new Arizona Campus opening in 2017.
In recognition of its strong commitment to economic engagement, ASU was named an Innovation and Economic Prosperity University by the Association of Public and Land-grant Universities (APLU). The designation recognizes public research universities working with public and private sector partners in their states and regions to support economic development through a variety of activities, including innovation and entrepreneurship, technology transfer, talent and workforce development, and community development.

More than 60 businesses – from small startups to Fortune 500 companies – are housed at SkySong, the ASU Scottsdale Innovation Center. The mixed-use residential/office/commercial space reached its halfway point in 2016 at 600,000 square feet. An additional 20 companies are located at the ASU Research Park in Tempe.
ASU, King's College London and the University of New South Wales in Australia have come together to form the **PLuS Alliance, a research and education partnership.** More than 20 tri-university degree programs will allow students to spend time on all three campuses and graduate with a joint degree. Offerings include bachelor's degrees in sustainability, global health, and business and global logistics management, and master's degrees in the science of health care delivery and infectious diseases intelligence and sustainability.

"The partnership will bring together some of the best minds on the planet and tackle many of the big questions facing our societies today, which would simply not be possible for one institution working alone."

— Edward Byrne, president, King's College

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**Boosting Pakistan's law schools**

The Sandra Day O'Connor College of Law received $3 million from the U.S. Department of State’s International Bureau of Narcotics and Law Enforcement to enhance the practical skills of Pakistani law students and build capacity for improved curriculum, research and teaching methodologies at law schools.

**Shaping Mexico's power grid**

ASU has partnered with the Instituto Tecnológico y de Estudios Superiores de Monterrey on a three-year, $26 million grant to help Mexico explore options for updating its energy industry and connecting with its neighbors. ASU will apply its renowned expertise in power engineering to the project, as well as the economic modeling capabilities of Decision Theater.

**Empowering women entrepreneurs**

ASU secured a $5 million grant from the U.S. Department of State for Women & Entrepreneurship in the Americas. Through the WE Americas Accelerator, experts from ASU’s Thunderbird School of Global Management will provide mentorship, leadership training and business skills development to more than 75 female Latin American entrepreneurs.
FemtoSat receives Popular Mechanics Award

Popular Mechanics awarded its 2016 Breakthrough Award in the space category to the ASU team that created the SunCube FemtoSat satellite, which has set records for its small size and low cost to launch. The ASU researchers beat stiff competition for the award from MIT, Stanford and Princeton.

Popular Science lauds Zika test

A low-cost test for Zika virus developed by researchers at ASU and Harvard won the Popular Science 2016 Best of What’s New award in the health category. Using just a small strip of paper, each test costs less than $1 and holds potential for diagnosing a broad range of diseases.

Reframing the future of water

ASU’s Future H2O is shifting the narrative about water from one of scarcity to one of abundance. The initiative, announced at the White House Water Summit in March, focuses on wiser design principles; new data and algorithms for better water governance and business outcomes; and scalable, nature-inspired technologies.
Sweat patch to detect health

An ASU research team is developing a patch that absorbs sweat to track biological molecules, indicating the presence of a disease or infection. The project brings together engineering and health researchers and takes advantage of technology developed at ASU’s Flexible Electronics and Display Center.

Medieval texts unearthed

The discovery of medieval manuscripts in a German monastery has the potential to expand our knowledge of women’s lives and spirituality in the Middle Ages. The ASU team that led the discovery is now creating a digital resource to catalog and share the ancient texts.

Understanding fracking-related earthquakes

Injecting wastewater deep underground as a byproduct of fracking causes man-made earthquakes, an ASU study found. However, researchers say the risk can be reduced through monitoring pressure as it increases underground.

Controlling drones with the human mind

An ASU engineer developed a device that allows users to control multiple robotic drones with their own brains. The technology could enable swarms of drones to perform complex tasks, such as search-and-rescue missions.
Improved 3-D printing of metal

ASU engineers overcame a major obstacle in the 3-D printing of metal objects. Their technique promises to make manufacturing of metal components, devices and structures cheaper, simpler and less labor-intensive.

Darkweb research featured in Forbes

Cybersecurity experts have a problem. How can they stop hackers from exploiting vulnerabilities in software if they don’t know the vulnerabilities exist? A recent Forbes article described ASU’s promising approach to this challenge, which uses a machine learning system that monitors darknet and deepnet traffic for information about cyber-attacks before they happen.

Working to feed the world

An ASU researcher has devised a way to modify crops so they use less water and fertilizer but grow more food. The modification also enhances a plant’s tolerance to outside stresses. This development could greatly improve global food security as the world’s population expands.

ASU informs FDA ruling

More than 12 years’ worth of ASU research on the environmental and health effects of antimicrobial chemicals contributed to the recent FDA ban on their use in consumer products. The ruling was covered in the New York Times, the Arizona Republic and other major news outlets, praising ASU’s contribution to this public health victory.
ASU leads NASA Discovery mission

NASA selected ASU to lead a mission to Psyche, an asteroid that appears to be the exposed nickel-iron core of an early planet. Targeted to launch in 2023 and arrive in 2030, the mission could provide a unique look into the violent collisions that created Earth and the terrestrial planets.

ASU faculty will also play key roles on the Southwest Research Institute’s Lucy mission, which will investigate a swarm of primitive asteroids near Jupiter. Launching in 2021, Lucy will carry an instrument designed and built at ASU to measure asteroid surface temperatures and physical properties.

Intensive efforts from ASU space scientists in 2016 earned massive rewards to kick off the new year.
A New American University

Designed for Discovery

1 e-book

150 pages
23 stories
8 aspirations
7 videos

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