

Technology and Research Initiative Fund (TRIF)

TRIF investment at Arizona's three public universities accelerates research, technology transfer and workforce development needed to support a thriving knowledge-based economy.

TRIF was established through Proposition 301, a voter-approved sales tax increase dedicated to K-12 schools, community colleges and public universities. In 2018, Governor Doug Ducey and the Arizona Legislature extended Proposition 301 for 20 more years.

TRIF advances five strategic growth areas in our state:

1. Improving Health.
2. Water, Environmental and Energy Solutions.
3. National Security Systems.
4. Space Exploration and Optical Science.
5. Higher Education Access for Workforce Development.

A vigorous return on investment for Arizona

TRIF investment at Arizona State University has enabled:

\$2.57B

in new funding from external sources since FY 2002

254

new startup companies launched since FY 2002

892

new patents issued since FY 2002

TRIF-funded programming has provided hands-on training to

17,500

ASU graduate students/postdocs

and **9,800** undergraduates.

#1 in the U.S. for innovation

ASU ahead of MIT and Stanford

— U.S. News & World Report, 8 years, 2016–2023

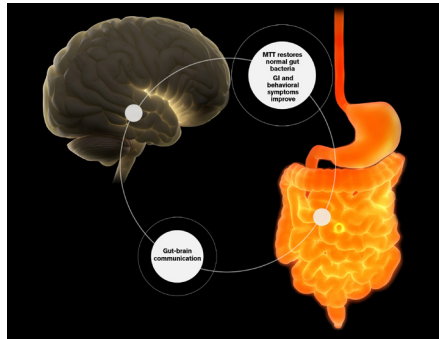


Learn more at: research.asu.edu/trif

TRIF-powered discovery and innovation

Treating autism from the gut

ASU scientists patented a treatment for symptoms of autism using gut bacteria. Finch Therapeutics has now licensed this treatment for clinical trials to advance the product into the marketplace. The researchers are also studying the link between gut microbes and menopause symptoms.



Engaging students on space missions

ASU student “lifeguards” working with the Interplanetary Initiative Lab contributed to a NASA mission to provide ground footage of NASA vehicles landing on the moon and capture rocket exhaust plume data, which allows scientists to study the geology of the surface where the rocket lands. The first graduating student lifeguard credits his work in the laboratory with helping him land a job at Blue Origin.

Bridging the cybersecurity workforce gap

Between 2013 and 2021, the number of unfilled cybersecurity jobs worldwide grew 350%. ASU experts are preparing Arizonans to fill the gap. They created a free introductory cybersecurity curriculum for middle school students and have trained 400 high school students to protect themselves and their data online. The open-to-the-world platform **pwn.college** provides learners of all ages with the skills to thwart cyberattacks.

Pulling water from thin air

SOURCE® Hydropanels use technology developed through ASU research to pull clean drinking water out of the air. The hydropanels are used in more than 50 countries, including on the Navajo Nation in Arizona, delivering clean water to communities in need.

Training soldiers for the battlefield of the future

Researchers at ASU created a training program to make soldiers safer and more effective in a changing world. A specialized course for military intelligence officers on artificial intelligence, machine learning and data science grew out of ASU projects with the Army Research Lab. The program prepares our soldiers to team with AI on the battlefield.



Accelerating nature-inspired solutions

TRIF enabled ASU to create the Biodesign Institute in 2003 and has fueled Biodesign’s impact on human health, community safety and global sustainability ever since.

2,500+

**AZ jobs
added yearly**

44

**spinout companies
launched**

\$265M

**AZ annual direct impact
(GSP)**

2021-2030 estimates. Source:
Seidman Research Institute report, 2021

Learn more at: research.asu.edu/trif