From Labs

UC Davis Research Brief:U.S. Department of Agriculture

UC Davis is a powerhouse for breakthroughs and impact. Our interdisciplinary research plays a vital role in building the region's economy. Our research contributes to our nation's global leadership in technology and innovation. Through collaboration between our top-ranked hospital and veterinary school, as well as our science and engineering discoveries, our research directly improves American lives.

The mission of the U.S. Department of Agriculture includes creating a safe, sustainable, competitive U.S. food system. UC Davis was awarded \$135 million in USDA funding in 2024.

UC Davis researchers have used USDA support to:

- Create strains of rice and wheat, staples that feed billions in the United States and beyond, with higher nutritional value and greater capacity to withstand drought and poor growing conditions
- Use <u>artificial intelligence</u> and optical imaging to quickly improve crop yield, quality, and disease resistance, and use robotics and other technology to reduce resource use and enhancing food safety
- Develop indoor, controlled-environment farming techniques to improve plant productivity and minimize exposure to pathogens
- Create a "glycopedia" of nutritional fibers to enable the development of individually tailored supplements to reduce inflammation and lessen our reliance on antibiotics
- Make forests more fire-safe and healthy and resilient with thinning and prescribed fires
- Provide training and support to small farms to assist in meeting food safety standards
- Provide vital support in 2024 for 128 UC Davis graduate student and 58 postdoctoral researchers in Sacramento and Yolo counties, individuals who will carry today's discoveries forward



UC Davis Research Brief:

U.S. Department of Agriculture (cont'd)

UC Davis Drives Economic Growth

- Supports \$2 billion in California economic activity and nearly 10,000 jobs
- 1,290 active patents
- 119 startups launched in last decade
- \$15 million in annual licensing, royalties and fees

Preparing the Future Workforce

Federal funding also plays a critical role in strategic preparations for the next generation of leaders, innovators and scientists. Agencies partner with UC Davis to offer workforce and career training in:

- Software security
- Advanced cell and gene therapy manufacturing
- Neuroengineering
- Plant breeding

A Cost-Efficient Model

The longstanding federal-university partnership leverages UC Davis expertise and stateof-the-art resources to generate new technologies and well-paying jobs, proving to be the most productive research model in the world.

Key facts on Facilities and Administration (F&A) costs:

- Current F&A rates do not cover all university costs
- F&A costs are not incidental—they are critical to conducting research
- F&A costs are essential to ensure safety in clinical and animal research

For more on F&A myths and facts,

visit: https://research.ucdavis.edu/3-things-to-know-about-indirect-costs-aka-fa/

