

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, improving the quality of life of residents and contributing to America's global leadership in technology and innovation. Collaboration across our top-ranked hospital and veterinary school, as well as our history of science and engineering discoveries, proves 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 [artificial intelligence](#) 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 post-doctoral researchers in Sacramento and Yolo counties, individuals who will carry today's discoveries forward.