From Labs

UC Davis Research Brief:National Science Foundation

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 National Science Foundation (NSF) supports fundamental science and engineering research, driving work with the potential to create products and solutions that improve people's lives. UC Davis was awarded \$43 million in NSF funding in 2024.

UC Davis researchers have used NSF support to:

- Develop new <u>laser and biophotonics technologies</u> for applications including advanced treatments for tumors, sequencing of DNA, and to observe the activity within living cells
- Test and develop <u>defenses against cyber attacks</u> on computer networks by hackers, worms and viruses
- Meet growing food supply demand by <u>increasing efficiencies using AI and bioinformatics</u> spanning the entire system from growing crops through consumption
- Utilize machine learning to provide early warnings of earthquakes and tsunamis and deliver precise information on potential disruptions and damage
- Provide entrepreneurial training to commercialize new products and technologies across sectors through the NSF I-Corps Hub
- Provide vitalf support in 2024 for 213 UC Davis graduate student and 33 post-doctoral researchers, individuals who will carry today's discoveries forward



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National Science Foundation (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/

