## 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



## **UC Davis Research Brief:**

## **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/

