From Labs to Lives

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, 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 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 toto:

- 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 <u>NSF I-Corps Hub</u>.
- Provide vitalf support in 2024 for 213 UC Davis graduate student and 33 post-doctoral researchers, individuals who will carry today's discoveries forward.

