

# The Power of Federal Research Investments

**UC Davis is a powerhouse for scientific breakthroughs and impact** serving our state and nation. Our interdisciplinary research improves our citizens' quality of life, drives economic growth and contributes to America's global leadership and security.

## Breakthroughs Enabled by Federal Research Funding

### HEALTH

- Brain-computer interface that translates brain signals into speech
- Biophotonic technologies to treat tumors, sequence DNA and more
- Landmark surgery to treat spina bifida
- Highly accurate, low-cost scanners to improve cancer detection
- New model to understand Alzheimer's disease and test treatments

### AGRICULTURE

- Identifying traits in global food staples rice and wheat to improve yield
- Using AI and bioinformatics to meet food demand
- Advance indoor farming techniques to improve productivity and minimize pathogens

### TECHNOLOGY

- Computers that function more like the human brain to better address unpredictable events.
- Novel optoelectronic approaches to improve the energy efficiency of AI hardware
- Study bird flight to improve the next generation of uncrewed aerial systems, or drones

## Driving 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

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# The Power of Federal Research Investments (cont'd)

## Preparing the Future Workforce

Federal funding also plays a critical role in strategic preparations for the next generation of leaders, innovators and scientists, offering 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 state-of-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 Facility 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/>

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