### From Labs to Lives

# **UC Davis Research Brief:** U.S. Department of Defense

**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 Department of Defense** fosters discoveries in that advance America's scientific and technical superiority in security, communications and other fields. UC Davis was awarded \$19 million in DoD funding in 2024. UC Davis researchers have used DoD support to:

- Assess safety and efficacy of traumatic brain injury (TBI) treatments to improve patient outcomes
- Develop ultrathin infrared sensors that could revolutionize detection of gas, chemicals and medical conditions
- Improve the energy efficiency of AI hardware by combining innovations in photonics and electronics
- Develop computers that process information in ways more like the human brain, improving their capacity for handling unpredictable events
- Design ultra-fast microchips capable of processing large volumes of data for radar and communications in complex electromagnetic environments
- Create a model temporary healthcare facility to handle patient surges from mass casualty events
- Apply motion capture to birds in flight to improve the design and capabilities of drone technology
- Develop a brain-computer interface that translates brain signals into speech
- Provide vital support for 51 UC Davis graduate student and 14 post-doctoral researchers, individuals who will carry today's discoveries forward



# UC Davis Research Brief: U.S. Department of Defense (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/

