From Labs to Lives

UC Davis Research Brief:
U.S. Department of Energy

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 Energy enhances security and prosperity by applying transformative science and technology solutions to energy and environmental challenges. UC Davis was awarded $12 million in Energy funding in 2024. UC Davis researchers have used Energy support to:

- Design mechanisms to sense valuable rare earth minerals in coal and coal byproducts
- Create ultrafast laser technology for supercomputers to efficiently process vast amounts of data using only light
- Develop poplar trees that can be grown in harsh conditions to provide heat, power and liquid fuels
- Reduce energy use in the food industry by efficiently capturing and reusing waste heat from appliances and technologies
- Develop high-temperature receivers to harness solar-thermal power
- Produce a radar- and AI-driven mobile sensor to detect underground power lines
- Advance experimental high-energy physics to unleash groundbreaking medical, aerospace and other technologies of the future
- Provide vital support for 71 UC Davis graduate student and 23 post-doctoral researchers, individuals who will carry today's discoveries forward

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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 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 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/

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