From Labs to Lives

UC Davis Research Brief: National Institutes of Health

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 Institutes of Health fosters discoveries and strategies to prevent disease, enhance health and reduce illness and disability. UC Davis was awarded \$276 million in NIH funding in 2024. UC Davis researchers have used NIH support to:

- Invent a <u>brain-computer interface</u> that translates brain signals into speech, restoring communication capabilities for people who can't speak due to paralysis caused by a variety of illnesses.
- Develop a landmark form of surgery to <u>treat spina bifida</u>, a disease that can lead to lifelong cognitive, mobility, urinary and bowel disabilities.
- Create a cure for retinal vein occlusion, a common form of blindness affecting more than 1.6 million Americans, using stem-cell therapy.
- Advance stem-cell therapy that could <u>eliminate HIV from the body</u>, treat Huntington's disease and address other disorders.
- Create a total-body, highly <u>accurate, low-cost scanner</u> to detect cancerous tumors and develop <u>precision, fluorescence-based surgical tools</u> to remove tumors.
- Advance understanding of the <u>early stages of Alzheimer's disease</u>, which affects nearly 7 million people in the United States, to identify effective new treatments.
- Provide vital support in 2024 for 310 UC Davis graduate student and 161 postdoctoral researchers, individuals who will carry today's discoveries forward.

