



UC AND THE ECONOMY: HOW HIGHER EDUCATION KEEPS CALIFORNIA COMPETITIVE

- Many of California's leading knowledge-based industries – like the biotechnology and information technology sectors – were built on groundbreaking research done at the University of California. Today, California industry continues to rely on UC's world-class research, faculty and highly-skilled graduates to keep their businesses competitive.
- Areas with a high concentration of research universities are economic engines – and a recent Public Policy Institute report confirms that University-sponsored research and a highly educated workforce are the primary factors fueling new growth in California's economy.
- The breadth and depth of UC's research and workforce preparation are unparalleled in the nation, and have helped make California a global innovator in industries like information technology, telecommunications, semiconductors, biotechnology, aerospace, entertainment and agriculture.

UC – AN INVESTMENT IN CALIFORNIA'S ECONOMIC FUTURE

- UC has played a central role in keeping California a global economic leader, but California's needs are growing, its population diversifying. Overseas competition is increasing and businesses need a constant flow of good people and ideas.
- To keep the state competitive over the next 20-30 years, UC must be able to address some of California's long-term challenges and needs:
 - **Workforce preparation:** While California has 16% of nation's high-tech jobs, it grants less than 9% of its science and engineering baccalaureate degrees. Despite a 50% increase in UC computer science and engineering enrollment, the number of degrees in these fields would need to increase by 70% to meet the workforce shortfall now faced by the state's high-tech industry.
 - **UC graduate students:** Enrollments have been flat while other states' have grown. Graduate students are a huge contributor to the workforce and research that drives a knowledge-based economy. UC is planning for growth here, but needs state support.
 - **UC academic preparation:** UC's K-12 programs ensure that students across the state get the training and education they need to get college-ready and contribute to our economic future. More than 50% of participants enroll at UC, CSU, or a community college, compared to 25% of peers. If K-12 shortfalls are not addressed, California will fall further behind in workforce preparation and cannot remain a global economic leader.
 - **Math and science education:** The lack of high-quality math and science teachers in California schools is placing the state's economic future at risk. We desperately need workers in knowledge-based fields where math and science is key. UC (with CSU) is creating a program that lures college students into math/science and provides support to stay in the profession.
 - **Pursuing new research:** Pursuing discoveries in nanotechnology, info-technology, biomedicine and other fields is crucial in creating California's "next" economies.



UC EVERYWHERE: A DAY IN THE LIFE OF CALIFORNIA

While these are uncertain times for California, the state remains the envy of the world – a testament to the success of innovation, diversity, tolerance and entrepreneurship.

And while many know that UC provides a great education and conducts world-class research, its contributions extend beyond campus borders. UC is a powerful engine for California's economic growth and a vital resource in improving the health of all Californians. A few "everyday" examples of UC's impact:

- **When you eat breakfast:** Much of the success of California's \$27 billion agricultural industry can trace back to UC. From the first experiments with citrus growing in Southern California, to today's \$767 million strawberry industry, which relies heavily on a steady stream of varieties developed and patented by UC.
- **When you log on to your computer:** UC research helped build the foundations of the Internet, and UC technology and training played an integral role in the state's high-tech revolution. Several of the state's top high-tech companies were founded by UC grads.
- **When your children go to school:** In recent years, UC's K-12 academic preparation programs have improved test scores and teacher proficiency. More than 50% of participants enroll at UC, CSU, or a community college, compared to 25% of peers.
- **When you visit a doctor:** UC trains two-thirds of California's medical students and about one-half of the state's doctors. As the state's 5th largest healthcare system, UC cares for a large share of California's poor and uninsured. UC is a global leader in cancer treatment, spinal cord research and transplant surgeries.
- **When you get in your car:** UC research has led the way in creating earthquake-proof bridges and buildings, fuel-efficient vehicles and better traffic engineering systems.
- **When you watch a movie:** UCLA's film school is perhaps the premier public film program in the world, with such notable graduates as Francis Ford Coppola.

Find out more about the economic effects and quality-of-life contributions of the University of California, visit: www.universityofcalifornia.edu/itstartshere