

2014-2015 Highlights

Berkeley Research

UNIVERSITY OF CALIFORNIA



CRISPR/Cas 9, a gene-editing technique that can target and modify DNA with new accuracy, holds great promise for understanding and treating complex genetic diseases.

Research Excellence

Each year, the UC Berkeley campus receives well over half a billion dollars in research support from external sources. In the fiscal year ending June 30, 2015, UC Berkeley attracted \$691.1 million in new research funding. Many of these research awards fund multi-year projects and support expenditures that will be reflected in subsequent years. The federal government provided 56 percent of these sponsored research funds, and California state agencies and other government sources, industry, and the non-profit sector supplied the rest. Of the research funding provided by the U.S. government, the largest contributors are the National Aeronautics and Space Administration, the National Institutes of Health and the National Science Foundation.

PRECISION MEDICINE

Innovative Genomics Initiative

Led by Jennifer Doudna, the Innovative Genomics Initiative (IGI) focuses on “DNA scissors” referred to as CRISPR/Cas9. The technology has exploded in popularity since it was first published in June 2012 and is at

the heart of several new start-ups. IGI was established at UC Berkeley’s Li Ka Shing Center for Genomic Engineering in early 2014 with a generous gift from the Li Ka Shing Foundation.

SPACE SCIENCE

Exploring the Universe

The Breakthrough Prize Foundation and its founder, investor Yuri Milner, recently committed \$100 million over 10 years to UC Berkeley and other institutions to lead enhancements in the search for extraterrestrial intelligence.

UC Berkeley cosmologists are also expanding programs related to the study of the early universe. NSF provided new support for the Simons Array, a new system of three powerful telescopes. Led by scientists from UC Berkeley and other institutions, the Simons Array will search for the signature of cosmic inflation — the rapid expansion of the early universe after the Big Bang.

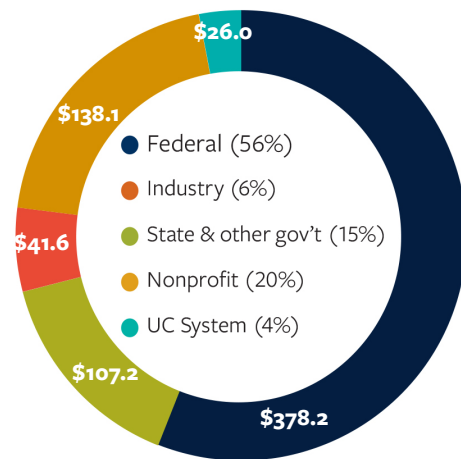


NEUROSCIENCE

Early Success of Brain Initiative

The first research grants of President Obama’s BRAIN Initiative included three awards to UC Berkeley researchers, totaling \$7.2 million, to improve advanced brain imaging tools, compile a complete catalog of brain neurons, and construct probes of neuron signaling that can be switched on or off with light. UC Berkeley also has a new \$5.6 million collaboration with Carl Zeiss Microscopy to fast-track microscopy development for new neurotechnologies.

2014/15 Research Funding by Sponsor in Millions



Total Awards = \$691.1M

Calculated on the basis of project period

DESIGN INNOVATION

Jacobs Institute

Opening August 2015, Jacobs Hall is a new campus hub for engineers, artists and game-changers of all kinds who work at the intersection of design and technology. Light-filled studios provide flexible space with access to tools for prototyping, iteration and fabrication. A \$20 million gift from the Paul and Stacy Jacobs Foundation supports the Institute’s many educational activities.

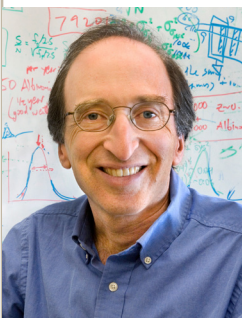


Drawing on distinguished experts from numerous fields, Berkeley faculty are leading the charge in using research to make profound changes in the way we understand and interact with the world.



Breakthrough Prize Winner
JENNIFER DOUDNA

Jennifer Doudna is best known for her pioneering work on CRISPR/Cas9, a tool for editing genes that offers a potent new approach to understand and treat complex genetic diseases. She received the Breakthrough Prize in 2014.



Nobel Laureate
SAUL PERLMUTTER

Saul Perlmutter received the 2011 Nobel Prize in Physics. He led one of the two research teams that simultaneously discovered the accelerating expansion of the universe. He received the Breakthrough Prize in 2014.



Former Secretary of Labor
ROBERT B. REICH

Robert B. Reich is a professor of public policy at UC Berkeley. A former secretary of labor, Reich has served in three administrations. He is a frequent contributor to national media.



Nobel Laureate
RANDY SCHEKMAN

Randy Schekman received the 2013 Nobel Prize in Physiology or Medicine for his role in revealing the machinery that regulates the transport and secretion of proteins in our cells.



Chair of the Federal Reserve
JANET YELLEN

Janet Yellen, Chair of the Federal Reserve since 2014, was a distinguished faculty member in Business Administration and Economics at UC Berkeley prior to joining the Federal Reserve.

Berkeley Counts Among Its Current Faculty:

7 Nobel Laureates

3 recipients of the A.M. Turing Award

3 recipients of the Fields Medal in Mathematics

21 Howard Hughes Medical Institute Investigators

32 MacArthur Fellows

1 National Poet Laureate

357 Guggenheim Fellows

4 winners of the Pulitzer Prize

13 recipients of the National Medal of Science

235 Fellows of the American Academy of Arts and Sciences

96 members of the National Academy of Engineering

144 members of the National Academy of Sciences

61 winners of the National Science Foundation Young Investigators Award