

# Innovation at Work California

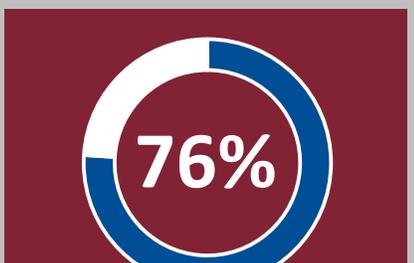


Total Direct and Indirect  
Economic Output of the  
Biopharmaceutical Sector

**\$243.8 billion**

Total Employment  
Supported by the  
Biopharmaceutical Sector

**851,563**



**Local Perspective:  
San Francisco, CA**



Keith Yamamoto, Ph.D., Vice  
Chancellor for Science Policy and  
Strategy; Vice Dean for Research,  
School of Medicine, University of  
California, San Francisco

*“We are witnessing an  
accelerated understanding of  
basic biological mechanisms  
that will lead to revolutionary  
new approaches to treat and  
prevent disease... Federal  
investment is the building  
blocks for long-term,  
transformative scientific  
discoveries.”*



Californians who died from  
Cardiovascular Disease in 2014

**78,000**

A majority of Americans agree that  
even if it brings no immediate  
benefits, basic scientific research  
that advances the frontiers of  
knowledge is necessary and should  
be supported by the federal  
government.

Total NIH Award Funding  
(FY16)

**\$3,686 million**

## Research in the Golden State

### *The Salk Institute of Biological Sciences, University of California, San Diego (UCSD), and Nimbus Therapeutics, La Jolla, CA*

In a National Institutes of Health (NIH) and Department of Defense (DoD)-funded collaboration between the Salk Institute, UCSD and Nimbus Therapeutics, researchers are working to develop a new treatment to inhibit cancer growth by interrupting an enzyme vital to lipid synthesis.

### *University of California, Berkeley, Berkeley, CA*

The National Science Foundation (NSF) is funding researchers at UC Berkeley who are investigating the role of cilia, hair-like structures on gut cells, in the relationship between bacteria and the body. Researchers hypothesize that cilia impacts the ability of bacteria to cause infections, illuminating a potential new avenue for therapeutics.

### *Eli Lilly and Company, Sacramento, Imperial, Los Angeles, CA*

Eli Lilly and Company is conducting phase III clinical trials to evaluate the effectiveness of a new drug in preventing migraines, which affects over 12% of adults in the U.S.

SOURCES: NATIONAL INSTITUTES OF HEALTH, PHARMACEUTICAL RESEARCH AND MANUFACTURES OF AMERICAN (PHRMA), CENTERS FOR DISEASE CONTROL AND PREVENTION, A RESEARCH AMERICA SURVEY OF U.S. ADULTS CONDUCTED IN PARTNERSHIP WITH ZOGBY ANALYTICS IN JUNE 2016, CLINICALTRIALS.GOV, THE SALK INSTITUTE, NATIONAL SCIENCE FOUNDATION.