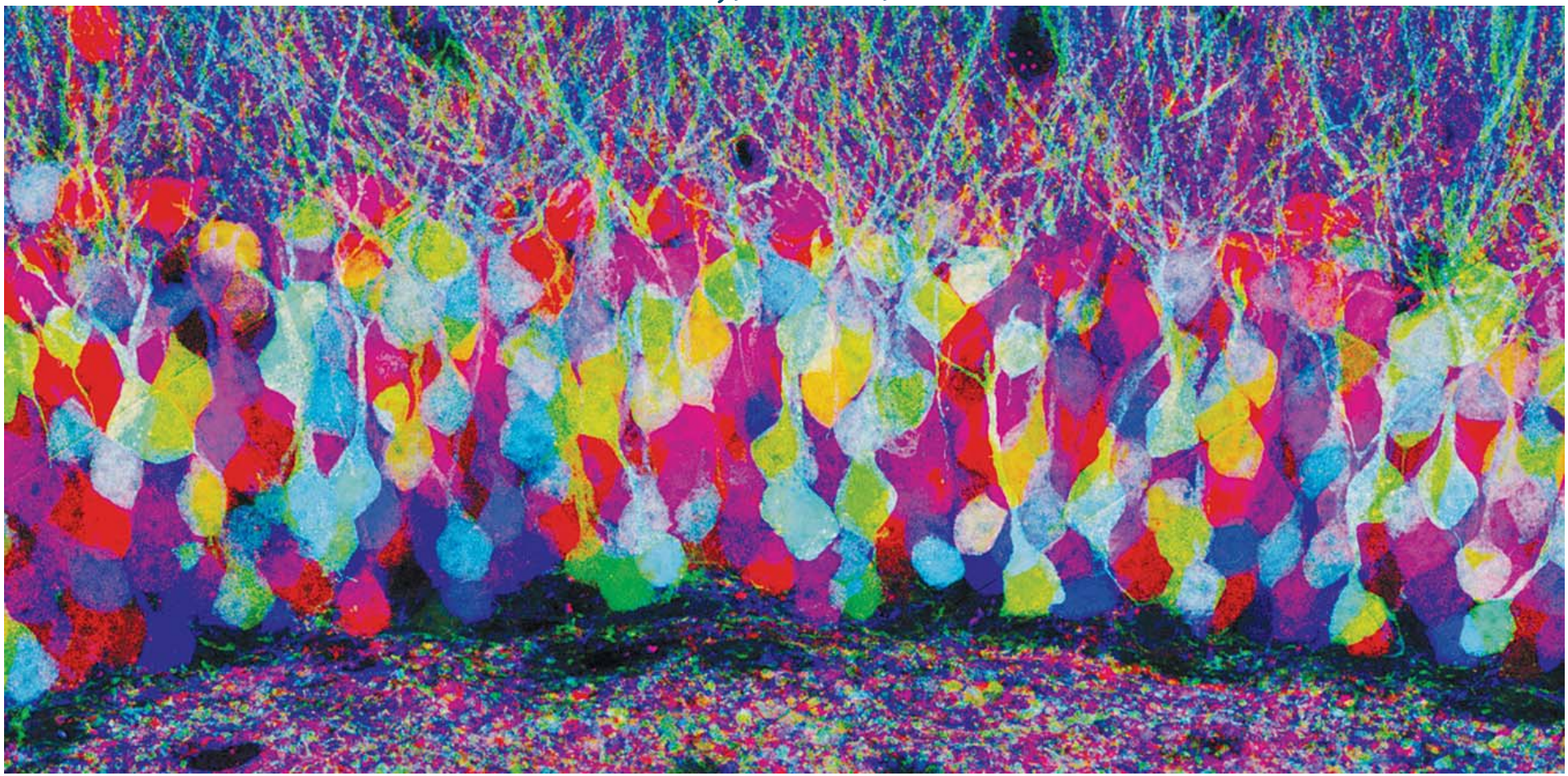
The Life Sciences Industry in California

Silicon Valley Tax Directors Group
Stanford Park Hotel
Thursday, March 5, 2009



C · H · I
California Healthcare Institute

Defining California's Biomedical Industry

- *Academic research*
- *Biopharmaceuticals*
- *Diagnostics*
- *Laboratory services*
- *Medical devices*
- *Wholesale trade*

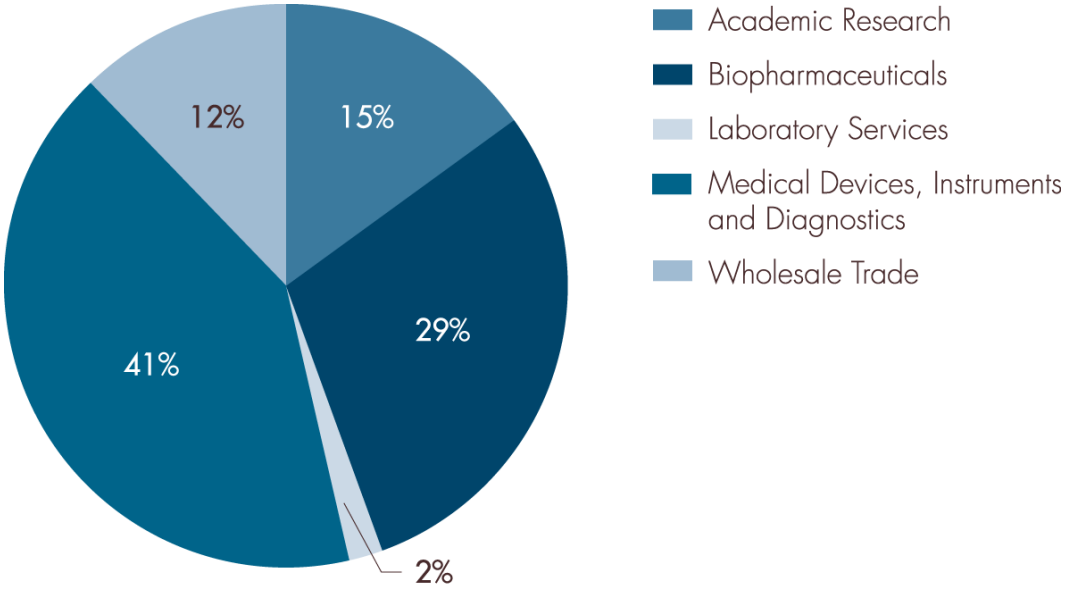
California Biomedical Industry Highlights

- *Total biomedical companies:* *2,042*
- *Total estimated revenue:* *$74.5 billion*
- *Total estimated employment:* *271,000*
- *Overall biomedical average wages:* *$75,000*
- *Total NIH grants awarded:* *$3.2 billion*
- *Total estimated VC investment:* *$4.3 billion*
- *Estimated private investment in R&D:* *$28.2 billion*

Employment

Highlights

Companies making medical devices, instruments and diagnostics represent 41% of the sector.

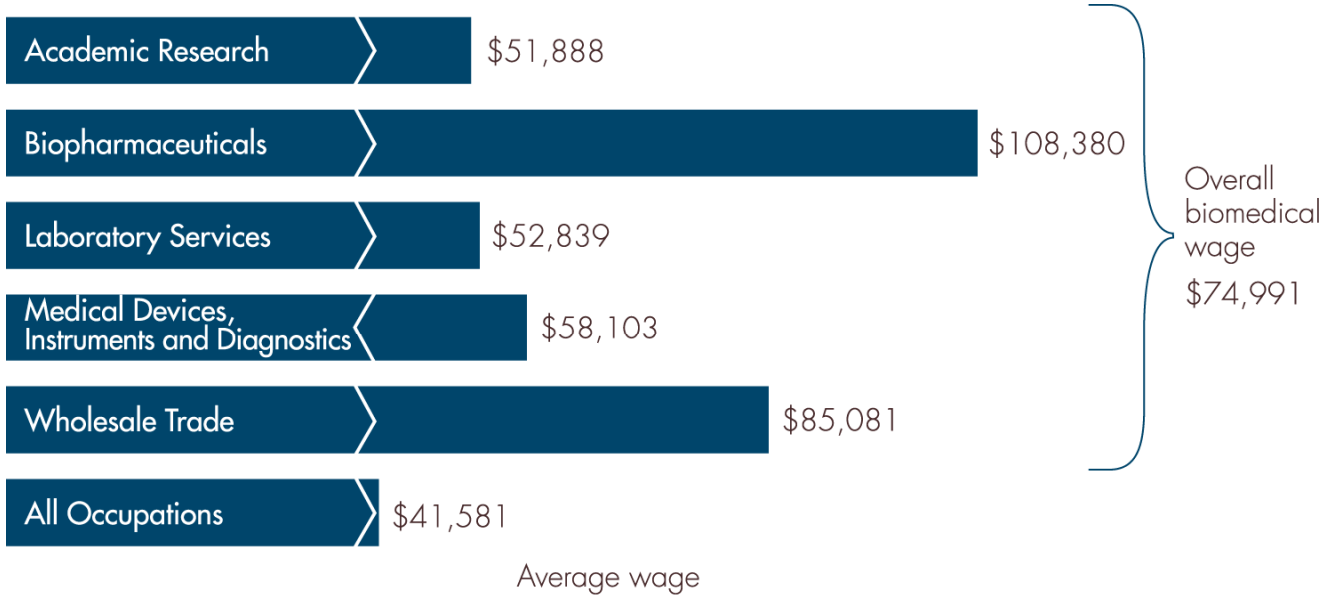


Note: Numbers may not sum to total due to rounding
Source: California Employment Development Division Bureau of Labor Statistics and company-specific SEC filings.

Robust Wages

Highlights

Average industry wage of $75,000 outpaced by 80% the estimated annual wage of all occupations in the state.

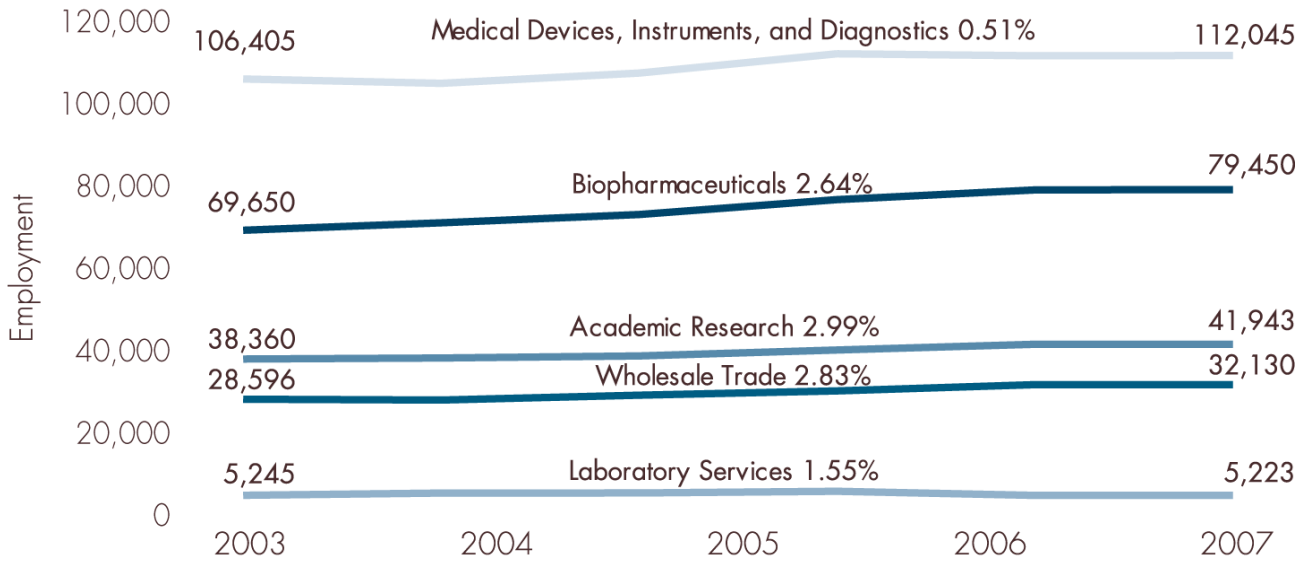


Note: 2006 wages inflated to 2007 using the Consumer Price Index
Source: Bureau of Labor Statistics

Employment Growth

Highlights

Between 2003 and 2007, the industry added approximately 23,000 jobs and grew at an annual average rate of 1.76%.

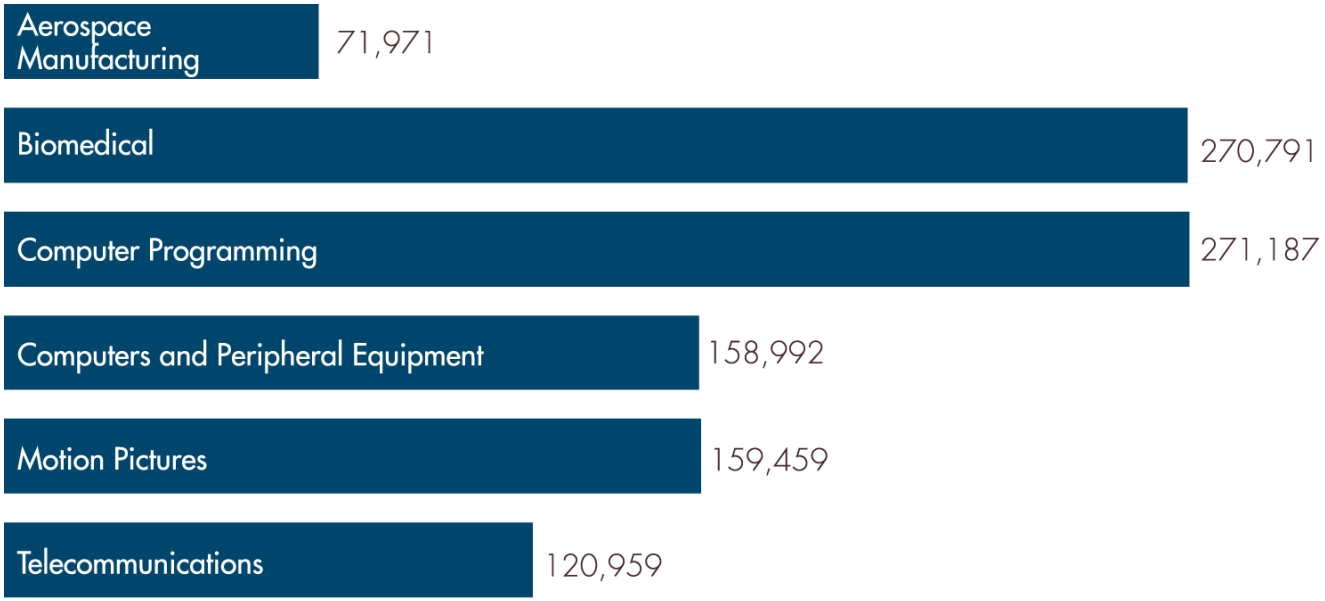


Source: California Employment Development Division, Bureau of Labor Statistics, and company specific SEC filings.

Leading High-Tech Employer

Highlights

The biomedical sector employs significantly more people than aerospace and motion pictures combined.



Source: California Employment Development Division, Bureau of Labor Statistics

Industry Committed to California

- *53% expect to increase workforce in next two years*
- *51% expanded in-state R&D capacity in 2007; 35% expect to expand R&D activities*
- *41% expect to increase California manufacturing workforce within next two years; 53% expanded in-state manufacturing capacity in 2007; 49% plan to expand in-state manufacturing activities*

Is California Missing Opportunities?

Highlights

While committed to operating in California, biomedical firms are expanding operations, employment, revenues and tax dollars in other states and countries.

- *56% expanded outside of California*
- *34% expect to expand manufacturing outside of the state in the next two years*

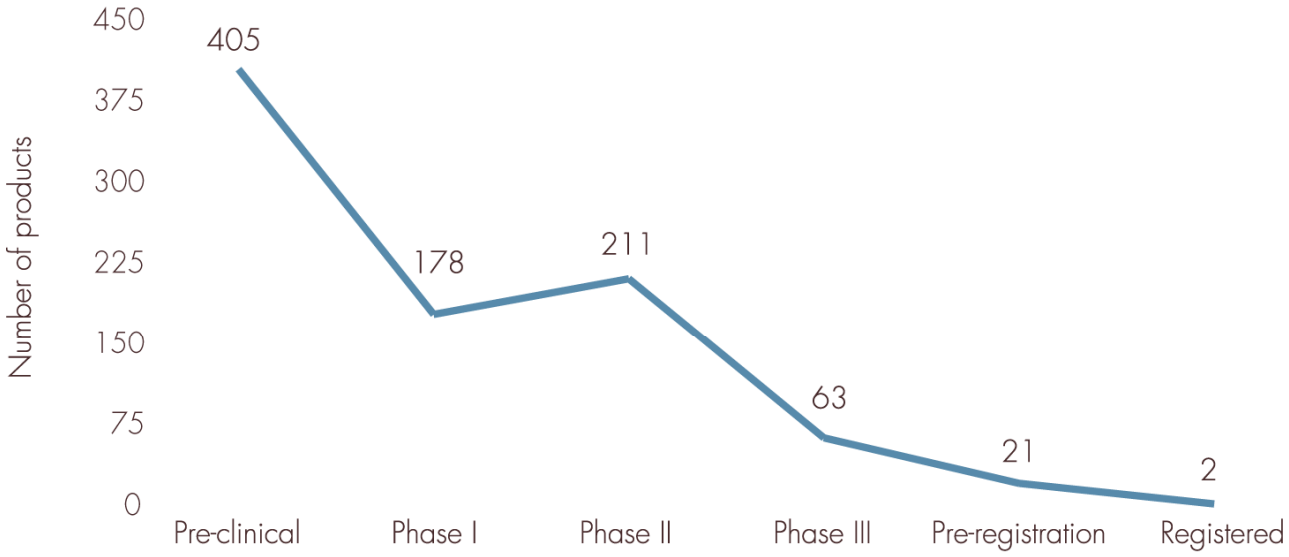
Investing in R&D

- *Public biomedical companies that are doing business in California invested an estimated $28.2 billion in the research and development of new products in 2007 for unmet medical needs.*

California's Biopharmaceutical Pipeline

Highlights

California companies have almost 900 products in the pipeline, 452 of which are being evaluated in clinical trials.



Source: IMS Health R&D Focus July 2008

Cancer a Major Focus of Medical Innovation

Highlights

About one third (32%) of the products in California's pipeline target cancer.

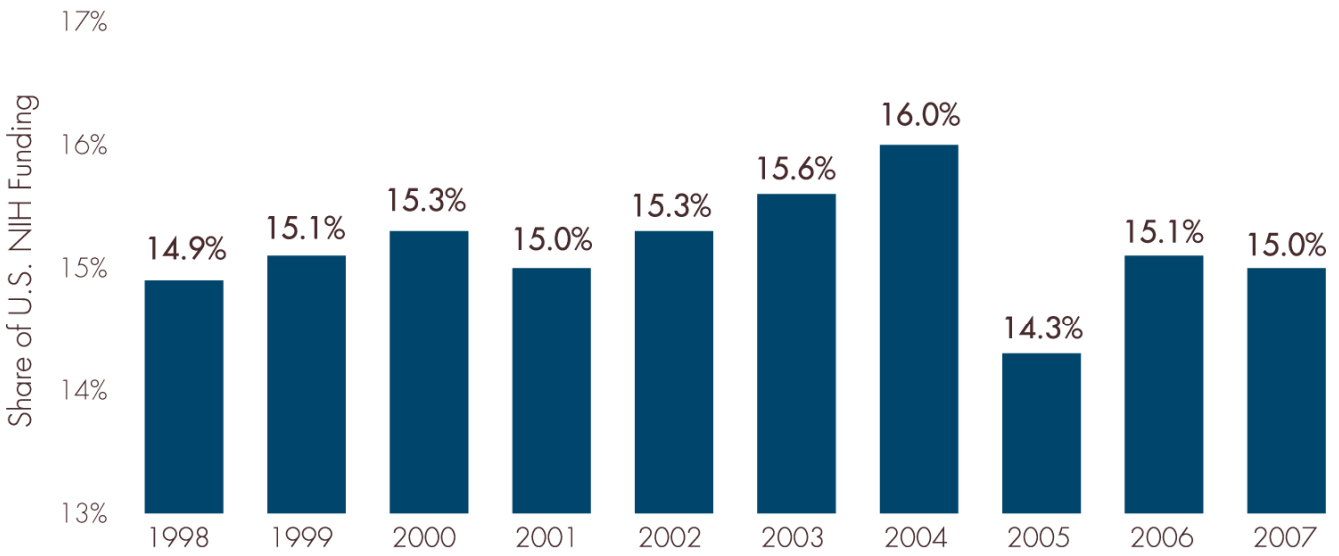
Disease Focus	Number in CA pipeline
Oncology	282
Central Nervous System	131
Infectious Diseases	115
Immune System and Inflammation	92
Cardiovascular and Blood Diseases	88
Diabetes and Metabolics	79

Source: IMS Health R&D Focus July 2008

California's Share of Total NIH Grants

Highlights

California's academic research centers lead the nation in grant funding and commercial licensing agreements.

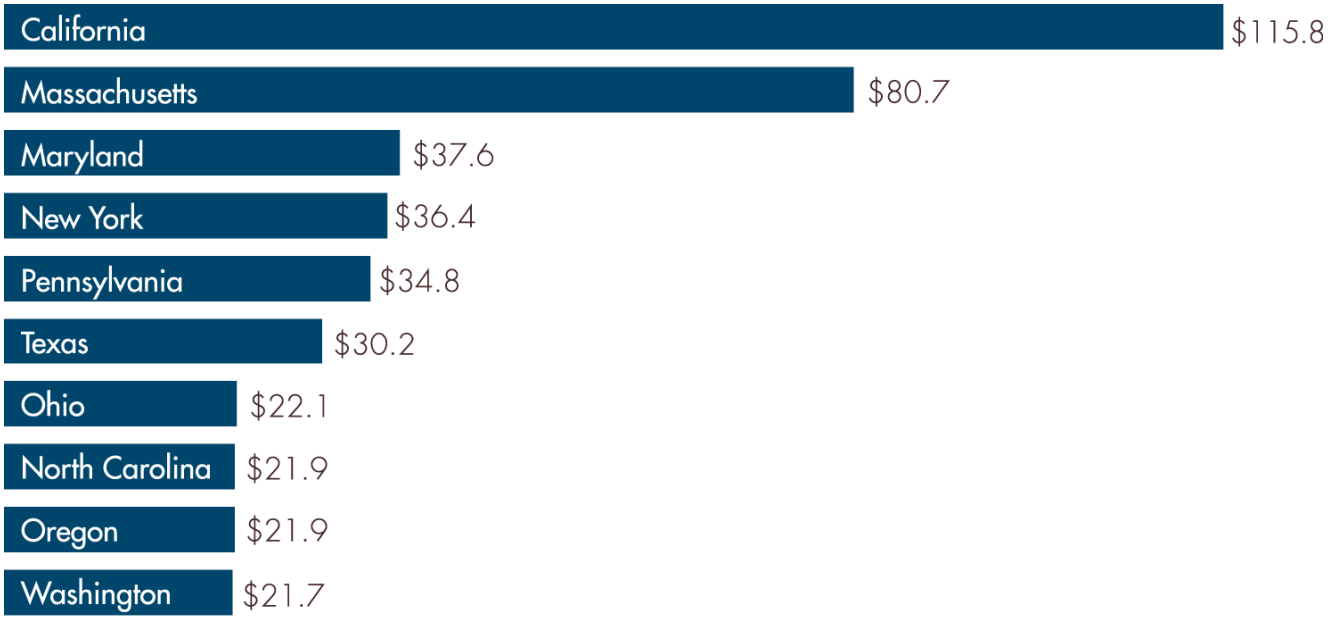


Source: National Institutes of Health, Office of Extramural Research

Government Funding Fuels Small Business Growth

Highlights

The state received the largest number of NIH SBIR and STTR awards (315) and largest amount of funding ($115 million) in U.S.



Source: National Institutes of Health, Office of Extramural Research

California Leads the World in Life Sciences Innovation

Highlights

Rebuilding the industry will demand a level of economic and political ingenuity commensurate with the creativity that originally inspired us.

- *Biomedical industry's essential value = human health + enterprise*
- *Continued success depends on government investment in basic research, ready access to capital, fair reimbursement for innovation*
- *Workforce development and education must be a priority*