



The Bay Area generated **\$135.6B** in economic activity in 2018, the highest of any regional cluster in California.



\$1.7 billion in research funding from National Institutes of Health (NIH) for FY2018.



2,735 Life Science establishments



Key Life Science occupations:
**Biochemists & Biophysicists, Microbiologists
Biological Technicians, Medical Scientists.**

THE IMPACT OF LIFE SCIENCE IN THE BAY AREA

The Bay Area includes the nine counties surrounding the San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties. Bay Area companies in the Life Science industry employed 134,589 people in 2018, with average annual earnings exceeding \$137,000 per year, the highest average annual earnings of any of the California regions. Total jobs in the region (direct/indirect/induced) was 367,458 in 2018 and economic activity generated \$135.6B. There was impressive growth in the Biopharmaceutical Manufacturing, Medical Devices & Diagnostic Equip and Research & Lab Services industry clusters between 2013 and 2018.

Annual Economic Impact

	IMPACT
Economic Activity	\$135.6B
Market Value of Goods & Services	\$87.7B
Total Jobs (direct/indirect/induced)	367,458
Labor Income (salaries/wages/benefits paid)	\$42.9B

NIH Funding

California received more than \$4.2B in NIH funding in fiscal year 2018 with \$1.7B flowing to the nine counties of the Bay Area, driving the pace of innovation in the area. San Francisco and Santa Clara counties lead the region in NIH funding, receiving \$767M and \$557M respectively.

Source: NIH (4/12/2019)

Subsector Employment & Establishments

	Employment in 2018	Establishments
BioRenewables Includes biofuels, specialty enzymes and chemicals, algae research, and key elements of agriculture	2,196	148
Biopharmaceutical Manufacturing The production of medicines, botanicals, pharmaceuticals, in-vitro diagnostic substances, and biological products.	23,862	141
Medical Devices & Diagnostic Equip Laboratory equipment and supplies, optical instruments, electromedical apparatus, surgical and medical instruments, and dental equipment.	23,473	619
Life Science Wholesale Wholesaling and distributing medical equipment and supplies and the wholesaling of pharmaceuticals and related products.	3,772	295
Research & Lab Services R&D in biotechnology, related areas of nanotechnology, medical laboratories, and portions of industries representing testing laboratories, other R&D services, and higher education.	81,286	1,532

'Establishment' refers to an individual facility/physical location. Some firms have multiple locations, which would each be counted separately.

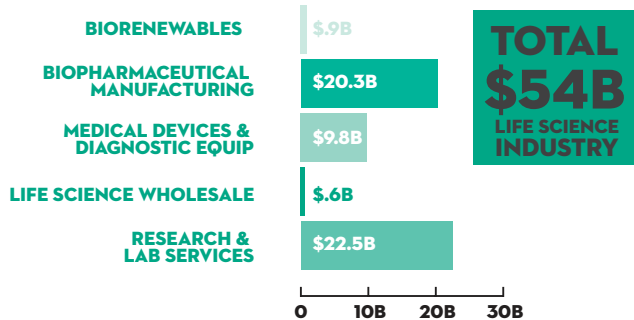


Subsector Average Wage (Wages by Sector & County)

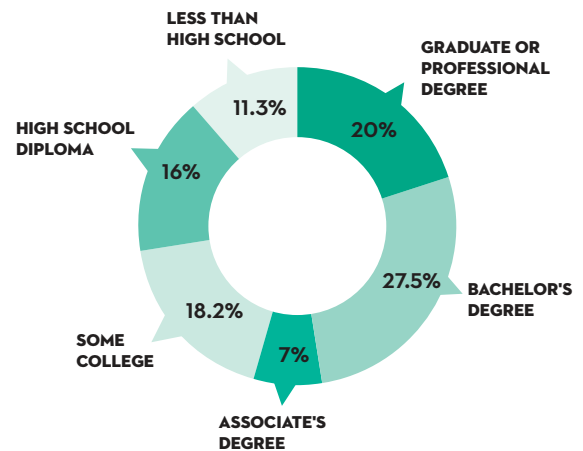
	BIORENEWABLES	BIOPHARMACEUTICAL MANUFACTURING	MEDICAL DEVICES & DIAGNOSTIC EQUIP	LIFE SCIENCE WHOLESALE	RESEARCH & LAB SERVICES	ALL LIFE SCIENCES
Alameda	\$80,766	\$167,605	\$148,484	\$103,483	\$103,285	\$112,239
Contra Costa	\$47,883	\$150,431	\$103,734	\$96,465	\$80,584	\$88,063
Marin	\$46,587	\$305,088	\$55,536	\$130,975	\$79,113	\$158,917
Napa	\$58,357	Insufficient Data	\$74,649	\$50,142	\$39,910	\$50,841
San Francisco	\$69,943	\$218,060	\$96,667	\$157,231	\$127,238	\$127,848
San Mateo	\$44,422	\$284,475	\$161,244	\$167,915	\$218,119	\$225,030
Santa Clara	\$59,633	\$196,370	\$165,003	\$190,135	\$135,776	\$140,772
Solano	\$47,750	\$246,265	\$86,907	\$60,592	\$73,170	\$135,292
Sonoma	\$50,761	\$71,535	\$150,487	\$72,373	\$65,839	\$79,105



Foreign Exports of Life Science Products



Educational Attainment



Lifes Science Innovation Companies

The Bay Area has 1,512 Life Science Innovation Companies

	COMPANY COUNT
BioRenewables	6
Biopharmaceutical Manufacturing	146
Medical Devices & Diagnostic Equip	130
Research & Development	1,230

'Life Science Innovation Company' refers to companies in a subset of industry subsectors encompassing those who are doing work at the cutting edge of our industry (see full list of subsectors in Appendix 3 of the Biocom's 2019 California Economic Impact Report Databook). This should not be confused with 'Establishments,' which includes all physical locations of each company in the region in all industry subsectors

In California, the Bay Area has a distinct competitive advantage in overall education attainment, with almost 50% of the adult population achieving at least a bachelor's degree and 20% holding a graduate degree.

For full report visit: www.biocom.org/eir

Biocom is the largest, most experienced leader and advocate for California's life science sector. We work on behalf of more than 1,200 members to drive public policy, build an enviable network of industry leaders, create access to capital, introduce cutting-edge STEM education programs, and create robust value-driven purchasing programs.

This is a condensed summary of the Biocom's 2019 California Economic Impact Report produced by Biocom and TClower & Associates. Note that as a result of the structural changes in our industry definitions/NAICS codes, the data and analysis in this edition of the Biocom California Life Science Economic Impact Report should not be compared to previous editions.

