



The Bay Area generated **\$139.3B** in economic activity in 2019, the highest of any regional cluster in California



\$1.87 billion in research funding from National Institutes of Health (NIH) for FY2019



3,390 Life Science establishments



Key Life Science occupations: **Biological Scientists; Biochemists and Biophysicists; and 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 directly employed 145,190 people in 2019, with average annual earnings exceeding \$172,000 per year, the highest average annual earnings of any of the California regions. The industry supported over 387,000 jobs in the region (direct/indirect/induced) in 2019 and generated \$139.3 billion in economic activity. There was impressive growth in the Biopharmaceutical Manufacturing, Medical Devices & Diagnostic Equipment and Research & Lab Services industry clusters between 2014 and 2019.

Life Sciences companies are located throughout the Bay Area but specific concentrations of life science establishments can be found in San Francisco's Mission Bay, South San Francisco, the lower Peninsula, Berkeley/Emeryville, and the Tri-Valley region. Biopharma manufacturing is predominantly concentrated in Hayward, Fremont and Newark in Alameda County.

Annual Economic Impact

	IMPACT
Economic Activity	\$139.3B
Market Value of Goods & Services	\$90.1B
Total Jobs (direct/indirect/induced)	387,753
Labor Income (salaries/wages/benefits paid)	\$45.3B

NIH Funding

California received more than \$4.59B in NIH funding in fiscal year 2019 with \$1.87B flowing to the Bay Area, driving the pace of innovation in the region. San Francisco and Santa Clara counties lead the region in NIH funding, receiving \$847M and \$586M respectively

Source: NIH (4/2020)

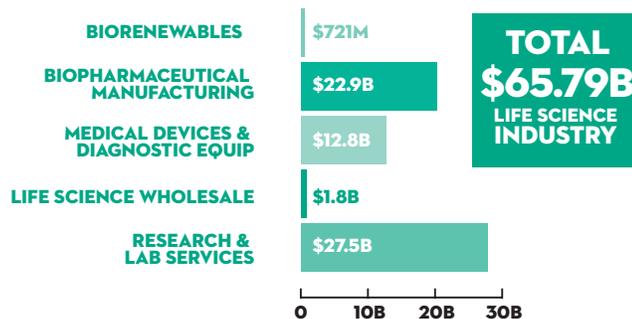
Subsector Employment & Establishments

	Employment in 2019	Establishments
BioRenewables Includes biofuels, specialty enzymes and chemicals, algae research, and key elements of agriculture.	2,075	155
Biopharmaceutical Manufacturing The production of medicines, botanicals, pharmaceuticals, in-vitro diagnostic substances, and biological products.	23,127	159
Medical Devices & Diagnostic Equip Laboratory equipment and supplies, optical instruments, electromedical apparatus, surgical and medical instruments, dental equipment and dental product producing laboratories.	24,741	658
Life Science Wholesale Wholesaling and distributing medical equipment and supplies, and the wholesaling of pharmaceuticals and related products.	7,223	571
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.	88,024	1,847
TOTAL	145,190	3,390

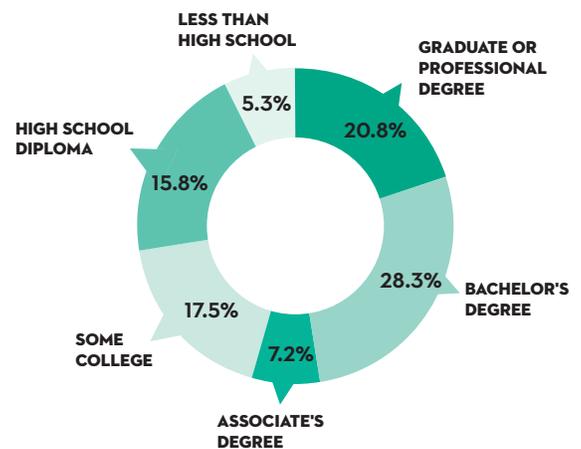
Subsector Average Wage (Wages by Sector & County)

	TOTAL LIFE SCIENCE JOBS	BIORENEWABLES	BIOPHARMACEUTICAL MANUFACTURING	MEDICAL DEVICES	LIFE SCIENCE WHOLESALE	RESEARCH & LAB SERVICES	ALL LIFE SCIENCES
Alameda	34,908	\$94,936	\$178,266	\$168,290	\$98,985	\$106,139	\$127,173
Contra Costa	5,289	\$56,534	\$155,675	\$103,475	\$111,639	\$81,299	\$98,688
Marin	3,359	\$55,711	\$321,764	\$111,354	\$151,502	\$86,455	\$256,114
Napa	904	\$62,560	Insufficient Data	\$69,419	\$58,172	\$43,383	\$54,255
San Francisco	19,139	\$69,573	\$154,320	\$109,466	\$147,569	\$148,357	\$147,260
San Mateo	32,435	\$45,677	\$338,950	\$299,380	\$176,691	\$226,244	\$263,188
Santa Clara	39,859	\$63,069	\$196,684	\$181,802	\$184,445	\$139,738	\$156,774
Solano	5,038	\$51,841	\$283,194	\$77,188	\$62,404	\$78,774	\$207,507
Sonoma	4,304	\$52,597	\$72,733	\$169,182	\$83,805	\$68,210	\$111,197

Foreign Exports of Life Science Products



Educational Attainment



Life Science Innovation Companies

The Bay Area has 1,486 Life Science Innovation Companies

	COMPANY COUNT
BioRenewables	8
Biopharmaceutical Manufacturing	151
Medical Devices & Diagnostic Equip	138
Research & Lab Services	1,189

Life Science Innovation Company refers to the unique company count in the most innovative sectors of the life science industry. These sectors include industrial biotechnology & biofuels, biopharmaceuticals, medical devices & diagnostics equipment, and research & lab services. This should not be confused with 'Establishments' which includes all physical locations of each company in the region in all industry subsectors. For more information, refer to Appendix 3 of Biocom's 2020 California Economic Impact Report Databook.

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 leader and advocate for California's life science sector. We work on behalf of more than 1,300 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 Biocom's 2020 California Economic Impact Report produced by Biocom and Clower & Associates. For the full report please visit our website: www.biocom.org/eir

The 2020 Databook used the same industry and cluster categories as the 2019 Databook, however, comparisons with data from years before 2019 should be made with caution due to changes in industries definitions, analytical assumptions, and data sources. At the time this data is being prepared, the impact of the global pandemic of COVID-19 is unknown and we must caution readers to consider how current and near-term economic conditions may influence future industry growth.