



2020 CALIFORNIA ECONOMIC IMPACT REPORT SOUTHERN CALIFORNIA



\$159.9B
in economic activity
in 2019



\$2.37 billion
in research funding from
National Institutes of Health
(NIH) for FY2019



6,972
Life Science
establishments

THE IMPACT OF LIFE SCIENCE IN SOUTHERN CALIFORNIA

Southern California includes six counties: Imperial, Los Angeles, Orange, Riverside, San Diego and Ventura Counties. The Southern California Life Science industry directly employed 242,414 individuals in 2019. The average earnings for these jobs exceeded \$104,000 per year. Total jobs in the region (direct/indirect/induced) was 668,212 in 2019 and economic activity generated \$159.9B. Key Life Sciences occupations in Southern California include Biochemists and Biophysicists; Microbiologists; Medical Scientists; and Biological Technicians. Reflecting sector growth in the Research & Lab Services cluster, the largest occupational job gains were for Medical and Clinical Laboratory Technologists and Technicians.

Annual Economic Impact

	IMPACT
Economic Activity	\$159.9B
Market Value of Goods & Services	\$86.5B
Total Jobs (direct/indirect/induced)	668,212
Labor Income (salaries/wages/benefits paid)	\$49.8B

NIH Funding

California received more than \$4.59B in NIH funding in fiscal year 2019 with \$2.37B flowing to Southern California's universities, labs and companies to support research in the life sciences industry. This represents more than half the NIH funding flowing to the state, signaling the high importance of innovation to the region.

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.	7,396	248
Biopharmaceutical Manufacturing The production of medicines, botanicals, pharmaceuticals, in-vitro diagnostic substances, and biological products.	20,790	358
Medical Devices & Diagnostic Equip Laboratory equipment and supplies, optical instruments, electromedical apparatus, surgical and medical instruments, dental equipment and dental product producing laboratories.	55,334	1,229
Life Science Wholesale Wholesaling and distributing medical equipment and supplies, and the wholesaling of pharmaceuticals and related products.	33,565	2,449
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.	125,329	2,688

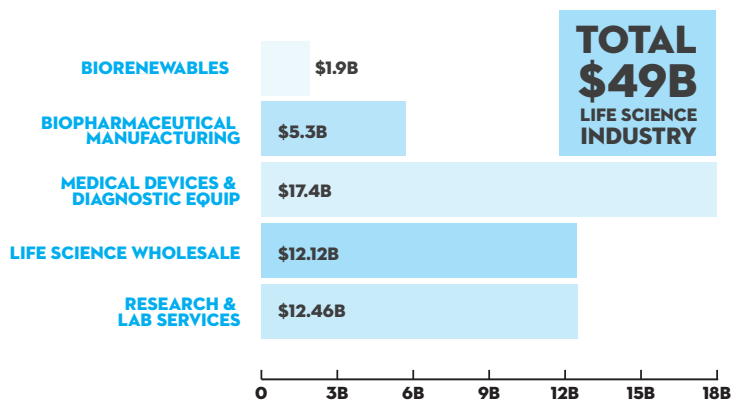
'Establishment' refers to an individual facility/physical location. Some firms have multiple locations, which would each be counted separately.

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

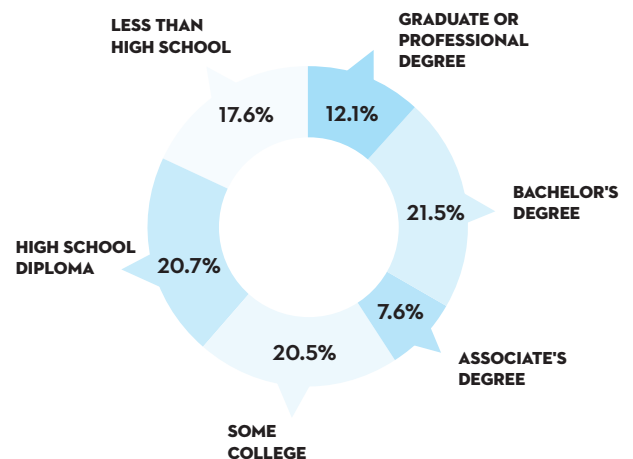
Subsector Average Wage (Wages by Sector & County)

	BIORENEWABLES	BIOPHARMACEUTICAL MANUFACTURING	MEDICAL DEVICES	LIFE SCIENCE WHOLESALE	RESEARCH & LAB SERVICES	ALL LIFE SCIENCES
Imperial	\$43,402	Insufficient Data	Insufficient Data	\$54,636	\$76,375	\$48,394
Los Angeles	\$55,868	\$90,882	\$97,041	\$91,699	\$82,673	\$86,501
Orange	\$52,098	\$94,266	\$124,815	\$129,803	\$75,502	\$108,177
Riverside	\$46,052	\$70,672	\$116,015	\$74,200	\$69,864	\$77,523
San Diego	\$52,158	\$149,676	\$140,984	\$166,903	\$122,915	\$130,411
Ventura	\$43,190	\$111,249	\$112,947	\$224,028	\$69,704	\$98,527

Foreign Exports of Life Science Products



Educational Attainment



Life Science Innovation Companies

Southern California has 2,652 Life Science Innovation Companies.

	COMPANY COUNT
BioRenewables	10
Biopharmaceutical Manufacturing	264
Medical Devices & Diagnostic Equip	229
Research & Lab Services	2,149

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.

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.