

GREATER LOS ANGELES SPOTLIGHT

The Greater Los Angeles cluster is home to over 3,900 life science establishments and a workforce of roughly 97,000. With an average salary of \$93,333 and an economic impact of \$61.5 billion, the life science industry continues to be a major component of Los Angeles' regional economy.

Total employment in 2022 in the Greater Los Angeles cluster (direct/indirect/induced) was more than 202,000. The Biotechnology sector took the lead with 10 percent YOY growth, followed by Food and Ag Biotech, and Research and Testing.

IMPACT BY THE NUMBERS

\$1.2B

Total NIH Awards

\$17.8B

Total Labor Income

\$165M

Total NSF Awards

202,335

Total Jobs Supported

\$61.5B

Total Economic Output

MORE KEY METRICS

Establishments..... **3,939**
 Avg. Wages per Worker
 in Life Science Industry... **\$93,333**
 Directly Employed
 Life Science Workers **97,117**

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The Greater Los Angeles cluster is composed of three counties—Los Angeles, San Bernardino, and Ventura—which together directly employed 97,117 life science workers in 2022, representing a 4 percent YOY increase.

The largest employment gains came from expansions at college, university, and professional schools as well as R&D in biotechnology organizations, which added 2,050 jobs and 695 jobs to the regional economy in 2022, respectively.

Overall Impact of Life Science Sectors in Los Angeles^[16], 2022

Impact Type	Direct Impact	Indirect Impact	Induced Impact	Total	Multiplier
Employment	97,117	58,237	46,986	202,335	2.08
Labor Income	\$9.6B	\$5.1B	\$3.1B	\$17.8B	1.86
Output	\$39.4B	\$13.3B	\$8.9B	\$61.5B	1.56

County-Level Economic Impact of Life Science Sectors in Los Angeles Geographies, 2022

County	Total Employment	Total Labor Income	Total Output
Los Angeles	175,156	\$15.5B	\$52.4B
San Bernardino	12,535	\$0.9B	\$4.2B
Ventura	14,643	\$1.4B	\$5.0B
City of Los Angeles	30,450	\$5.0B	\$15.5B

Key Metrics in Greater Los Angeles Area Geographies, 2022

County	Direct Employment	YOY Growth %	Establishments	Avg. Wages/yr	LQ	NIH Awards	NSF Awards
Los Angeles County	83,798	3%	3,248	\$106,000	1.0	\$1,187M	\$159M
San Bernardino County	7,227	5%	393	\$75,000	0.5	\$13M	\$4M
Ventura County	6,093	8%	298	\$99,000	1.6	\$5M	\$2M
City of Los Angeles	30,450	3%	N/A	\$107,000	1.2	\$1,124M	\$105M

[16] In this analysis, the City of Los Angeles is considered a sub-set of Los Angeles County

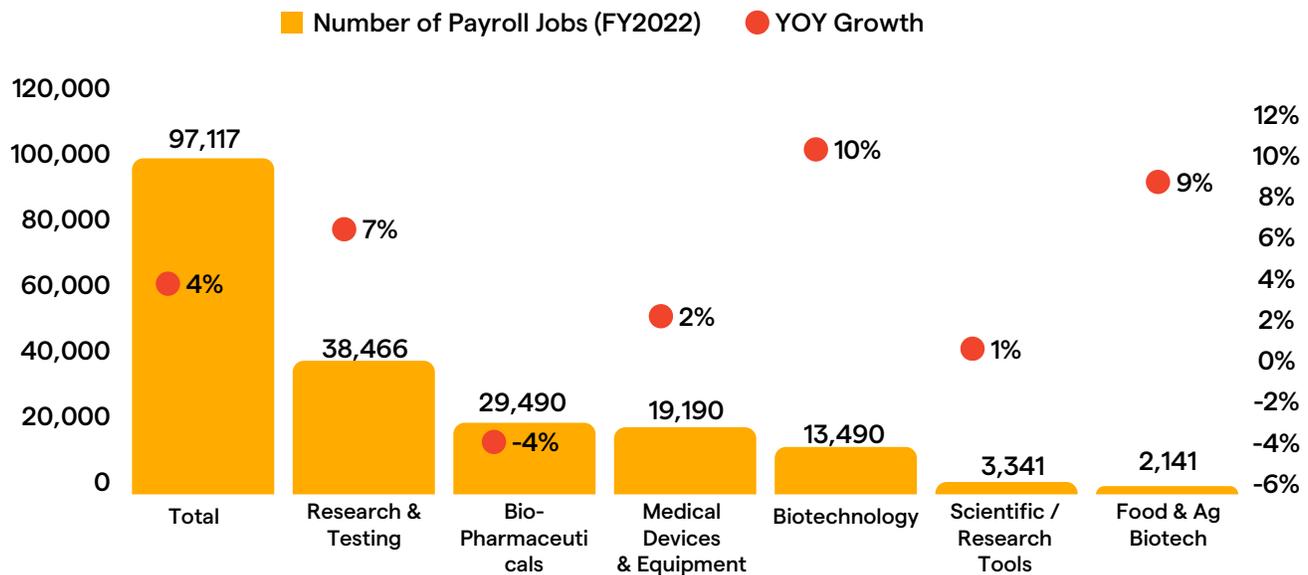
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Major life science employers in the region include: Amgen (HQ), Baxter (Regional Office), Grifols (HQ), Kite Pharma (HQ), and Xencor (HQ).

In 2022, the Biotechnology sector took the lead with 10% YOY growth, followed by Food and Ag Biotech, as well as Research and Testing.

Life Science Employment and Growth in Greater Los Angeles, 2022



Six major sub-sectors comprise the life science industry scope[4]:

- 1. Biotechnology:** Research and development in biotechnology; research and development in nanobiotechnology; artificial and synthetic fiber manufacturing; research and development in physical engineering and life science[5]
- 2. Biopharmaceuticals:** Medicinal and botanical manufacturing; pharmaceutical preparation manufacturing; intro-vitro diagnostic substance manufacturing; biological product manufacturing; drugs merchant wholesalers
- 3. Medical Devices and Equipment:** Ophthalmic goods manufacturing; irradiation equipment manufacturing; surgical and medical instrument manufacturing; surgical appliance and supplies manufacturing; optical instrument and lens[5] manufacturing; dental laboratories; medical, dental, and hospital equipment and supplies merchant wholesalers
- 4. Research and Testing:** Colleges, universities, and professional schools[5]; medical laboratories; testing laboratories[5]
- 5. Scientific/Research Tools:** Laboratory instruments manufacturing; laboratory chemicals (basic organic) manufacturing; electromedical and electrotherapeutic apparatus manufacturing
- 6. Food and Agriculture Biotechnology:** Ethyl alcohol manufacturing; nitrogenous fertilizer manufacturing[5]; phosphatic fertilizer manufacturing[5]; pesticide and other agriculture chemical manufacturing[5]

[4] See Appendix for the complete composition of North American Industry Classification System (NAICS) codes considered for life science industries; the 2023 edition of the Biocom California Life Science Economic Impact Report re-categorizes "Research and development in physical engineering and life science" as a "Biotechnology" sub-sector, and re-labeled sub-sector No. 4 as "Research and Testing"

[5] Life Science represents a fraction of overall activity in this NAICS area where other industry sectors may be more substantial

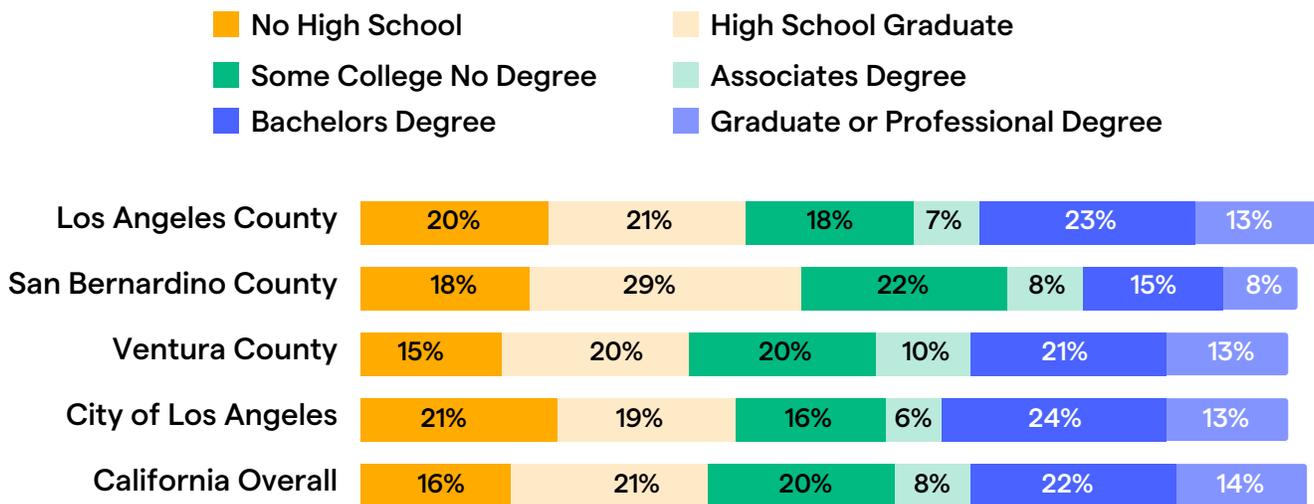
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In the Greater Los Angeles region, we see that more than 69% of adults do not hold a Bachelor's degree, compared to 65% statewide. The average wage in the life science industry in the Greater Los Angeles region is \$93,333.

The life science industry supports jobs for all education levels and Biocom California makes a concerted effort to engage with communities to broaden awareness of the employment opportunities that exist.

Total Regional Population Educational Attainment in Los Angeles Area Geographies, 2022



POLICY PRIORITIES

In Los Angeles, we advocate for land use and zoning policies that identify areas for future life science developments along with predictable and timely permitting processes. We support the region's workforce by partnering on diverse programs that

prepare current and future life science talent, regardless of their educational attainment levels. We also engage on traditional business issues such as taxes, reliability of utilities, enhancing transit systems, and availability of middle-income housing.

Biocom California | Greater Los Angeles Cluster

Biocom California is the largest, most experienced leader and advocate for California's life science sector. Our Los Angeles office aims to build the networks that are critical to growth in this thriving regional ecosystem. Our targeted programs and customized services are tailored to the specific needs of the Greater Los Angeles area, as we understand the life science sector's unique challenges in the region and are collaborating on working toward solutions. We work on behalf of more than 1,700 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.