

THE IMPACT OF LIFE SCIENCE IN SAN DIEGO COUNTY

The life science industry in San Diego County is among the strongest in the nation. The industry employs almost 50,000 people in five sectors: biopharmaceuticals, medical devices and diagnostics, research and lab services, bio-renewables, and life science wholesale. The county's life science employees support an additional 133,000 jobs, for a total countywide impact of over 183,000 jobs. The area with the strongest growth is research and lab services, which is expected to add 1,620 jobs between now and 2021.

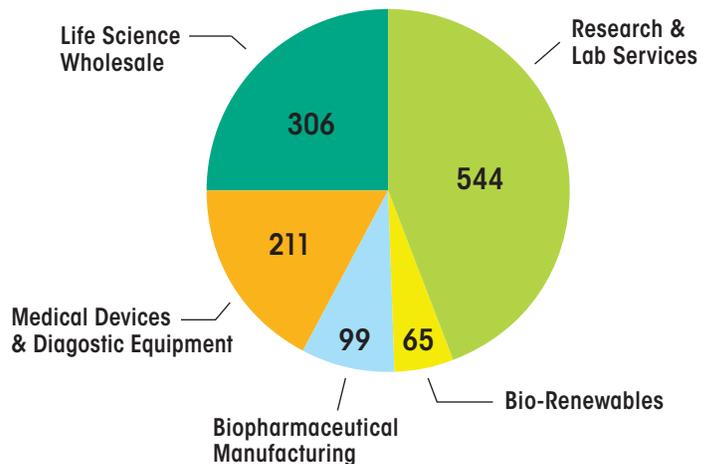
ANNUAL ECONOMIC IMPACT

DESCRIPTION	IMPACT
Economic Activity	\$33.6 billion
Gross Area Product	\$19.4 billion
Attributable Jobs	133,000
Labor Income	\$11.2 billion

The industry generates **\$34 billion** in annual economic activity.

Employment in the County's life science industry has increased by **20%** over the past five years.

BREAKDOWN OF LIFE SCIENCE COMPANY SECTORS



There are **1,225** life science establishments in San Diego County.

NIH Funding

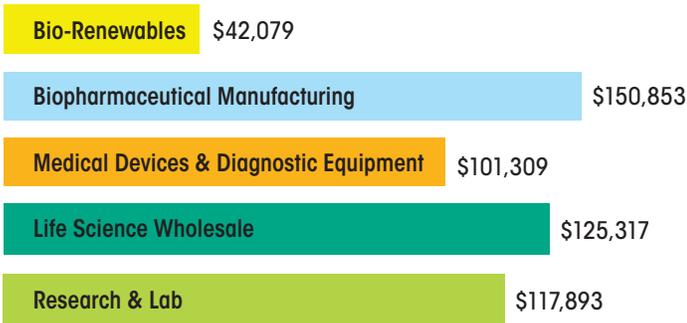
California received more than \$3.6B in 2016 with \$833 million of all NIH funding flowing to San Diego County and going towards private and public institutions, including universities, labs, and companies. This funding supports the cutting edge research being done here, and is a key reason San Diego County continues to be an internationally recognized center of innovation.

San Diego County received **\$833 Million** in Research Funding from National Institutes of Health (NIH) for FY2016.

SUBSECTOR	EMPLOYMENT IN 2016
Bio-Renewables	1,675
Includes biofuels, specialty enzymes and chemicals, algae research, and key elements of agriculture.	
Biopharmaceutical Manufacturing	6,876
The production of medicines, botanicals, pharmaceuticals, in-vitro diagnostic substances, and biological products.	
Medical Devices & Diagnostic Equipment	9,770
Laboratory equipment and supplies, optical instruments, electromedical apparatus, surgical and medical instruments, and dental equipment.	
Life Science Wholesale	4,117
Wholesaling and distributing medical equipment and supplies and the wholesaling of drugs and related products.	
Research & Lab Services	27,325
Research and development in biotech, medical laboratories, and industries representing testing laboratories, as well as higher education.	

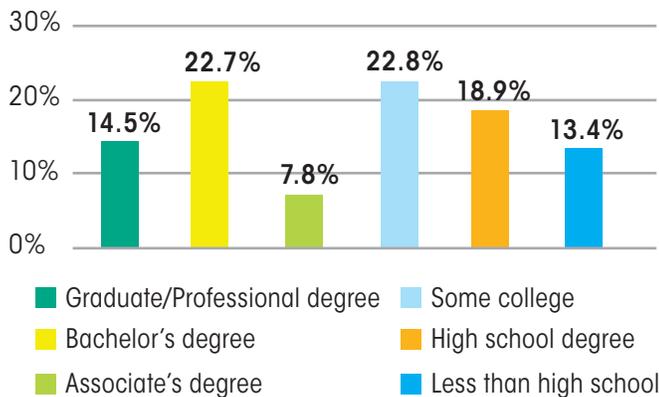
Economic Impact data prepared by TClower & Associates

AVERAGE WAGES ACROSS SUBSECTORS



The annual average industry wage was \$117,253 with Biopharmaceutical Manufacturing topping the industry at \$150,853.

EDUCATIONAL ATTAINMENT



San Diego County has a highly educated workforce. The share of the population with a graduate or professional degree, those with a bachelor's degree and those with some college, all lead the national levels by several percentage points at 14.5%, 22.7%, and 22.8% respectively. The percent of the County's population with only a high school diploma or less than high school, 16.2%, is substantially below the U.S. rate of 20.6%. Such above-average statistics reveal that the city's highly educated workforce fuels San Diego's stature as a leading cluster.

This is a condensed summary of the Economic Impact Report produced by Biocom and TClower & Associates. For the full report, please visit our website: www.biocom.org

Biocom Member Spotlight



Althea, one of Biocom's members in the pharmaceutical manufacturing subsector, is a fully integrated contract development and manufacturing organization (CDMO) with customers that range from large pharma to early stage biotech companies. Althea has seen tremendous growth in the last five years and has since doubled its workforce. Althea has a 25% sales growth year over year, which is projected to continue into the next three years.

- Products manufactured: all clinical phases through commercial
- Global reach: regulatory approvals in 8 countries and growing
- Aseptic filling of Drug Product in vials and syringes
- cGMP Drug Substance manufacturing
- Broad range of analytical development and testing
- Acquired by Japanese company Ajinomoto Inc. in 2013



Expanding into Antibody Drug Conjugate and High Potency Manufacturing



25%
year over year sales growth between 2013-2020



~500 employees (doubled since 2013)

About Biocom

Biocom is the largest, most experienced leader and advocate for California's life science sector. We work on behalf of more than 900 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.

Founded in 1995 in San Diego, Biocom provides the strongest public voice to research institutions and companies that fuel the local and state-wide economy. Our goal is simple: to help our members produce novel solutions that improve the human condition. In addition to its San Diego headquarters, Biocom has continuous staff presence in Los Angeles, San Francisco, Sacramento, Washington, D.C. and Tokyo. Our broad membership benefits apply to biotechnology, pharmaceutical, medical device, genomics and diagnostics companies of all sizes, as well as to research universities and institutes, clinical research organizations, investors and service providers.