

The U.S. Bioscience Industry: Fostering Innovation and Driving America's Economy Forward

Louisiana's bioscience industry has grown by nearly 11 percent since 2018, matching the national growth rate for the industry to total more than 12,000 jobs in 2021. All five of the industry's major subsectors contributed to the overall employment growth. Louisiana has a highly specialized employment concentration in the agricultural feedstock and industrial biosciences subsector (location quotient is 3.21). The state has increased its funding from NIH in recent years, and these federal awards totaled nearly \$206 million in FY 2021. This funding helps to support, in part, the state's academic R&D activities in bioscience-related fields, which totaled nearly \$497 million in 2020 across Louisiana's research universities.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Louisiana	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	12,353	2,135,704	IV
Bioscience Industry Location Quotient	0.47	n/a	V
Bioscience Industry Establishments	1,609	127,389	III
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$496,750	\$51,108,737	III
Bioscience Share of Total R&D	67%	63%	II
Bioscience R&D Per Capita	\$107	\$154	IV
NIH Funding, FY 2021			
Funding (\$ thousands)	\$205,711	\$34,751,109	III
Funding Per Capita	\$44	\$105	IV
Bioscience Venture Capital Investments, 2018-21 (\$ millions)	\$131.68	\$197,674.54	III
Bioscience-Related Patents, 2018-21	357	153,072	IV

State ranking figures for bioscience performance metrics are calculated as quintiles, where I = top quintile, III = middle quintile, and V = bottom quintile. For source notes, see end of State Profile.

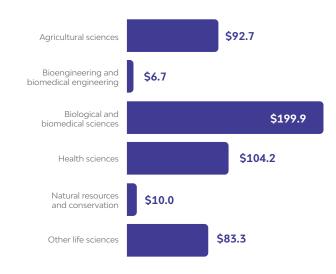
Establishments 27	2018-2021 Change 10.0% 1.9% 13.1% 14.7% 6.6%
Agricultural Feedstock and Industrial Biosciences Employment 2,743 1.2% 69,573 Average Annual Wage \$122,670 7.6% \$91,989 Establishments 865 20.3% 62,697 Bioscience-Related Distribution Employment 5,503 13.0% 602,589 Location Quotient 0.74 n/a Average Annual Wage \$114,029 13.3% \$121,606 Establishments 81 26.2% 10,268 Medical Devices and Equipment Employment 362 25.6% 398,847 Location Quotient 0.07 n/a	1.9% 13.1% 14.7% 6.6%
Feedstock and Industrial Biosciences Employment 2,743 1.2% 69,573 Average Annual Wage \$122,670 7.6% \$91,989 Establishments 865 20.3% 62,697 Bioscience-Related Distribution Employment 5,503 13.0% 602,589 Location Quotient 0.74 n/a n/a Average Annual Wage \$114,029 13.3% \$121,606 Establishments 81 26.2% 10,268 Medical Devices and Equipment Employment 0.07 n/a	13.1% 14.7% 6.6%
and Industrial Biosciences Location Quotient 3.21 n/a Average Annual Wage \$122,670 7.6% \$91,989 Bioscience-Related Distribution Employment 5,503 13.0% 602,589 Location Quotient 0.74 n/a Average Annual Wage \$114,029 13.3% \$121,606 Establishments 81 26.2% 10,268 Medical Devices and Equipment 562 25.6% 398,847 Location Quotient 0.07 n/a	14.7%
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Medical Devices and EquipmentEmployment36225.6%398,847Location Quotient0.07n/a	
and Equipment Location Quotient 0.07 n/a	17.4%
Location Quotient 0.07	5.5%
Average Applied Mage #47.401 0.09/ #00.401	
Average Annual Wage \$67,481 0.0% \$98,481	8.7%
Establishments 37 62.6% 5,973	34.7%
Employment 442 23.0% 344,839 Pharmaceuticals	11.9%
Location Quotient 0.10 n/a	
Average Annual Wage \$88,094 21.3% \$126,153	10.3%
Establishments 599 46.4% 46,503	34.5%
Research, Testing, and Employment 3,303 12.7% 719,856	19.3%
Medical Location Quotient 0.37 n/a	
Average Annual Wage \$61,762 21.1% \$147,396	22.0%
Establishments 1,609 29.5% 127,389	22.3%
Total Bioscience Employment 12,353 10.7% 2,135,704	11.0%
Industry Location Quotient 0.47 n/a	
Average Annual Wage \$99,681 11.9% \$125,750	16.4%
Establishments 137,427 8.9% 10,665,643	9.3%
Total Private Employment 1,516,645 -5.9% 123,376,557	-1.5%
Sector Location Quotient 1.00 n/a	
Average Annual Wage \$54,208 11.9% \$67,826	

Note: U.S. employment metrics include Puerto Rico.

Bioscience Research in Louisiana

Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

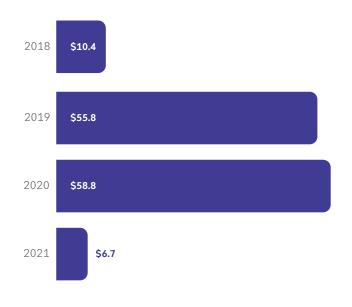
\$ Millions, FY 2018-2021



Bioscience Venture Capital in Louisiana

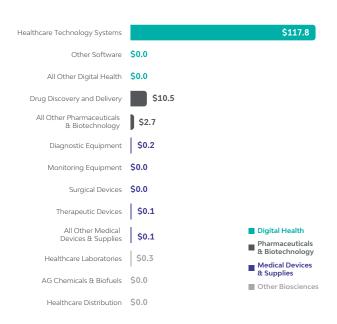
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

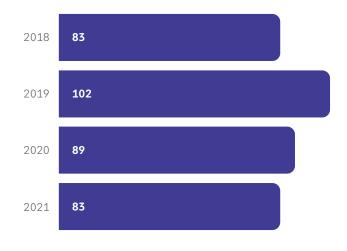
\$ Millions, 2018-2021



Bioscience Patents in Louisiana

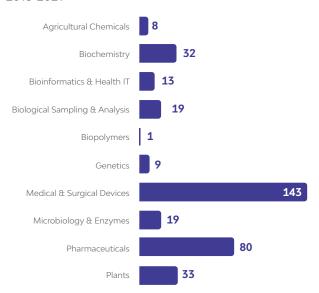
Bioscience-Related U.S. Patents

2018-2021



Bioscience-Related U.S. Patents by Segment

2018-2021



Source Notes

Employment, Establishments and Wages: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), enhanced by Lightcast (Datarun 2022.3).

Academic R&D Expenditures: National Science Foundation (NSF), Higher Education Research and Development (HERD) Survey.

NIH Funding: National Institutes of Health, NIH Awards by Location & Organization (summary information within RePORT database).

Venture Capital: PitchBook Data, Inc.

Patents: U.S. Patent & Trademark Office data from Clarivate Analytics' Derwent Innovation patent analysis database.

For a more detailed discussion of the data and methodology used, please see the Appendix to the full national report.



