



Texas

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

Texas' bioscience industry employed more than 116,000 across 7,462 business establishments in 2021, and it continues to grow at a rapid rate—from 2018 through 2021, industry employment grew by 15 percent, outpacing national industry growth. Four of the state's five major bioscience subsectors contributed to the overall industry job gains. Texas is among the top tier of states not only in the size of its industry base, but in several additional measures of its innovation ecosystem, including university R&D expenditures which exceeded \$4.1 billion in 2020; NIH funding at more than \$1.5 billion in 2021; venture capital investments with nearly \$4.9 billion from 2018-21; and in bioscience-related patent awards where 5,312 were awarded to state inventors since 2018.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Texas	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	116,473	2,135,704	I
Bioscience Industry Location Quotient	0.63	n/a	IV
Bioscience Industry Establishments	7,462	127,389	I
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$4,115,533	\$51,108,737	I
Bioscience Share of Total R&D	67%	63%	II
Bioscience R&D Per Capita	\$141	\$154	III
NIH Funding, FY 2021			
Funding (\$ thousands)	\$1,545,869	\$34,751,109	I
Funding Per Capita	\$52	\$105	IV
Bioscience Venture Capital Investments, 2018-21 (\$ millions)			
	\$4,876.47	\$197,674.54	I
Bioscience-Related Patents, 2018-21			
	5,312	153,072	I

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.

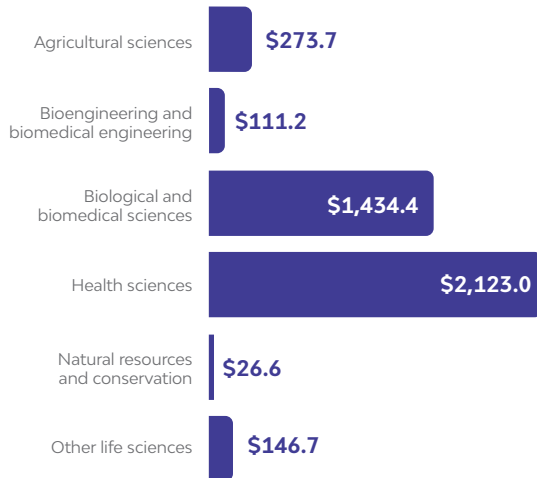
Industry Subsector		Texas		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	156	5.8%	1,948	10.0%
	Employment	4,762	-8.9%	69,573	1.9%
	<i>Location Quotient</i>	0.79		n/a	
	Average Annual Wage	\$108,013	4.9%	\$91,989	13.1%
Bioscience-Related Distribution	Establishments	3,853	7.2%	62,697	14.7%
	Employment	51,551	10.5%	602,589	6.6%
	<i>Location Quotient</i>	0.99		n/a	
	Average Annual Wage	\$124,244	14.5%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	701	32.6%	10,268	17.4%
	Employment	13,852	22.5%	398,847	5.5%
	<i>Location Quotient</i>	0.40		n/a	
	Average Annual Wage	\$88,543	6.9%	\$98,481	8.7%
Pharmaceuticals	Establishments	334	44.8%	5,973	34.7%
	Employment	13,898	11.0%	344,839	11.9%
	<i>Location Quotient</i>	0.47		n/a	
	Average Annual Wage	\$110,529	7.9%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	2,419	26.6%	46,503	34.5%
	Employment	32,409	26.5%	719,856	19.3%
	<i>Location Quotient</i>	0.52		n/a	
	Average Annual Wage	\$100,263	19.8%	\$147,396	22.0%
Total Bioscience Industry	Establishments	7,462	16.4%	127,389	22.3%
	Employment	116,473	15.0%	2,135,704	11.0%
	<i>Location Quotient</i>	0.63		n/a	
	Average Annual Wage	\$111,025	12.9%	\$125,750	16.4%
Total Private Sector	Establishments	751,441	10.8%	10,665,643	9.3%
	Employment	10,637,628	2.0%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$67,102	14.5%	\$67,826	18.9%

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

Bioscience Research in Texas

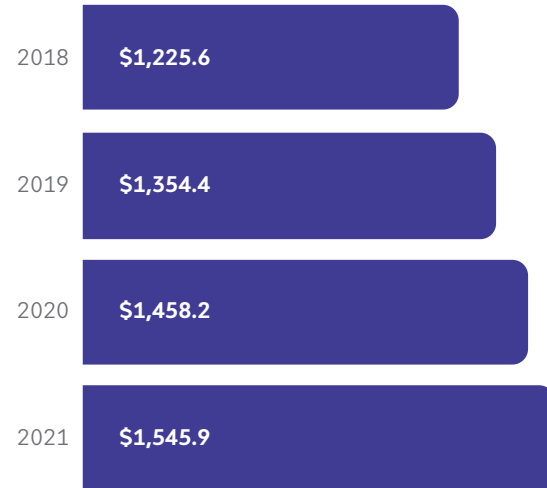
Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

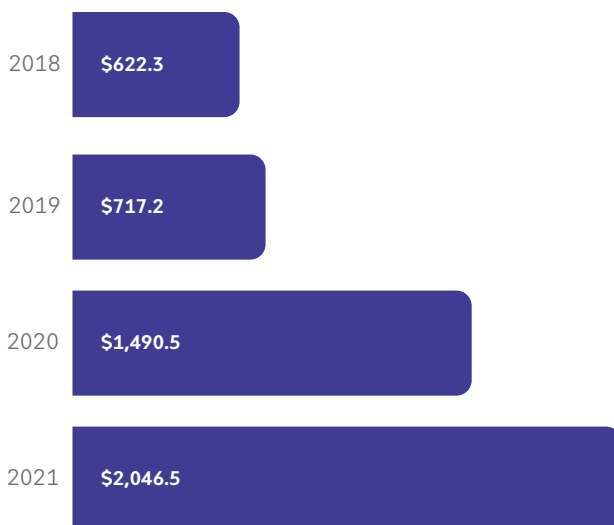
\$ Millions, FY 2018-2021



Bioscience Venture Capital in Texas

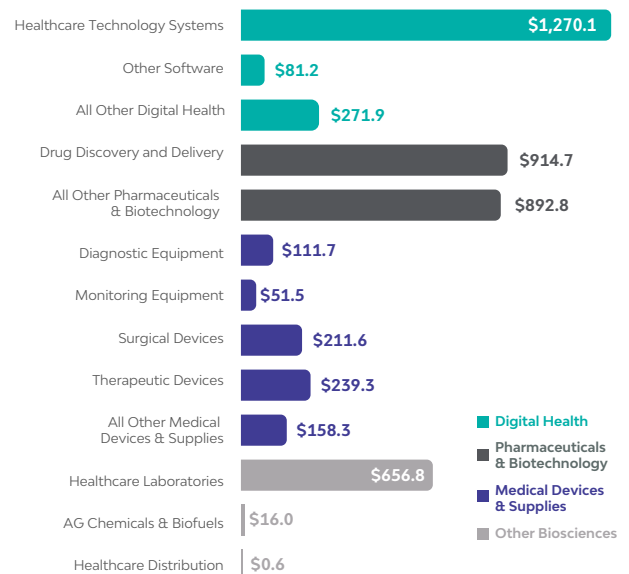
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

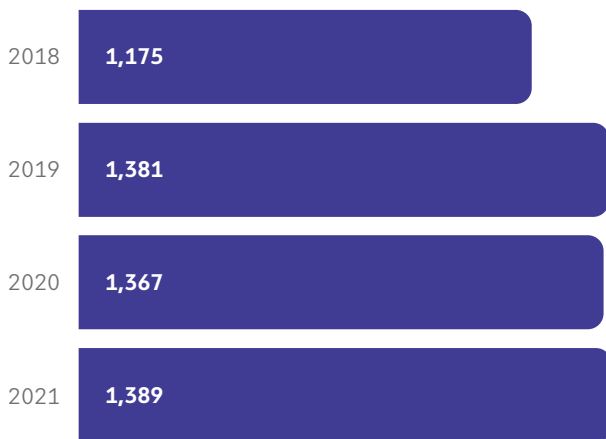
\$ Millions, 2018-2021



Bioscience Patents in Texas

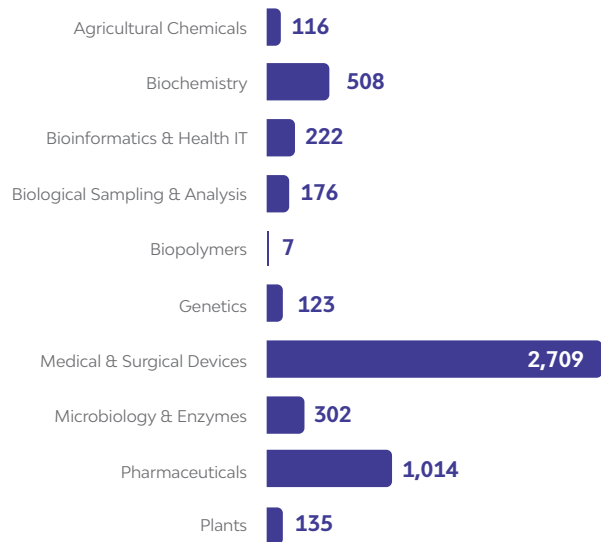
Bioscience-Related U.S. Patents

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.