



New Jersey

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

New Jersey's bioscience industry is among the national leaders in its size, specialized concentration of employment, and diversity of strengths. The industry grew its employment base by 9 percent from 2018 through 2021, reaching nearly 105,000 jobs across 4,340 business establishments. New Jersey has a high degree of industry specialization with 79 percent greater concentration of bioscience industry employment relative to the nation (location quotient is 1.79). Further, the state stands out in its breadth of industry strengths with a specialized employment concentration in three of the five industry subsectors—pharmaceuticals; research, testing, and medical labs; and bioscience-related distribution—as well as a high concentration in a fourth, medical devices and equipment. New Jersey is among the top tier of states in patent activity, with 7,309 patents awarded during the 2018-21 period in bioscience-related technology classes. Venture capital investments in state bioscience companies have increased in recent years and totaled more than \$700 million in both 2020 and 2021.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	New Jersey	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	104,989	2,135,704	I
Bioscience Industry Location Quotient	1.79	n/a	I
Bioscience Industry Establishments	4,340	127,389	I
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$688,976	\$51,108,737	III
Bioscience Share of Total R&D	53%	63%	IV
Bioscience R&D Per Capita	\$74	\$154	V
NIH Funding, FY 2021			
Funding (\$ thousands)	\$368,427	\$34,751,109	III
Funding Per Capita	\$40	\$105	IV
Bioscience Venture Capital Investments, 2018-21 (\$ millions)			
	\$2,584.75	\$197,674.54	II
Bioscience-Related Patents, 2018-21			
	7,309	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.

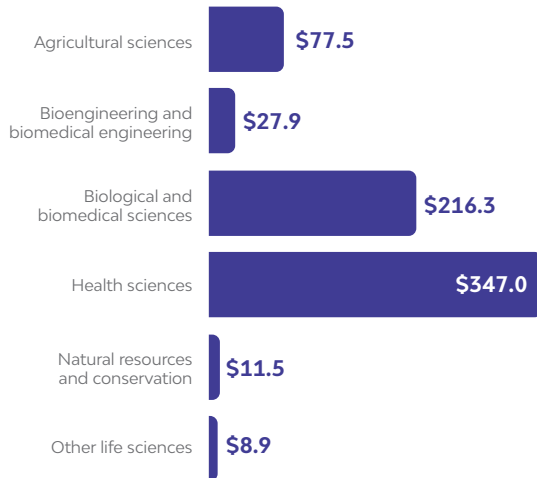
Industry Subsector		New Jersey		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	18	-13.6%	1,948	10.0%
	Employment	475	7.3%	69,573	1.9%
	<i>Location Quotient</i>	0.25		n/a	
	Average Annual Wage	\$73,799	7.4%	\$91,989	13.1%
Bioscience-Related Distribution	Establishments	1,788	13.0%	62,697	14.7%
	Employment	25,543	2.0%	602,589	6.6%
	<i>Location Quotient</i>	1.55		n/a	
	Average Annual Wage	\$154,852	11.4%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	357	21.4%	10,268	17.4%
	Employment	12,639	-4.7%	398,847	5.5%
	<i>Location Quotient</i>	1.16		n/a	
	Average Annual Wage	\$122,138	-13.1%	\$98,481	8.7%
Pharmaceuticals	Establishments	343	12.4%	5,973	34.7%
	Employment	25,562	16.4%	344,839	11.9%
	<i>Location Quotient</i>	2.70		n/a	
	Average Annual Wage	\$171,859	20.0%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	1,834	61.4%	46,503	34.5%
	Employment	40,770	14.1%	719,856	19.3%
	<i>Location Quotient</i>	2.06		n/a	
	Average Annual Wage	\$183,132	15.3%	\$147,396	22.0%
Total Bioscience Industry	Establishments	4,340	30.0%	127,389	22.3%
	Employment	104,989	8.9%	2,135,704	11.0%
	<i>Location Quotient</i>	1.79		n/a	
	Average Annual Wage	\$165,670	12.5%	\$125,750	16.4%
Total Private Sector	Establishments	293,956	11.7%	10,665,643	9.3%
	Employment	3,384,880	-2.5%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$76,595	17.2%	\$67,826	18.9%

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

Bioscience Research in New Jersey

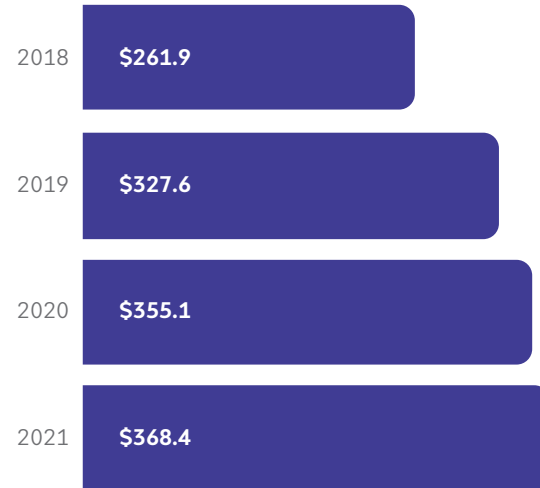
Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

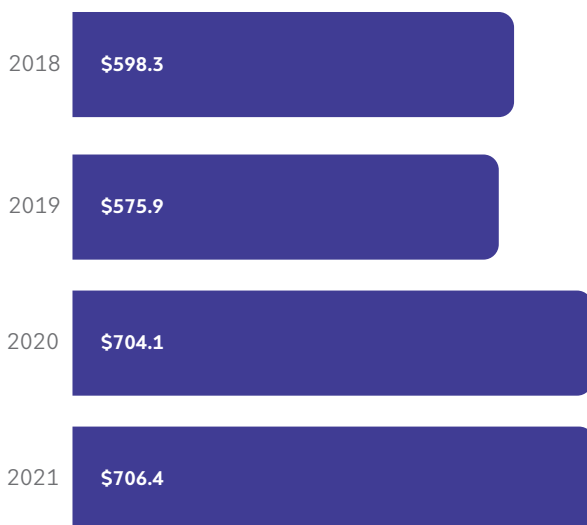
\$ Millions, FY 2018-2021



Bioscience Venture Capital in New Jersey

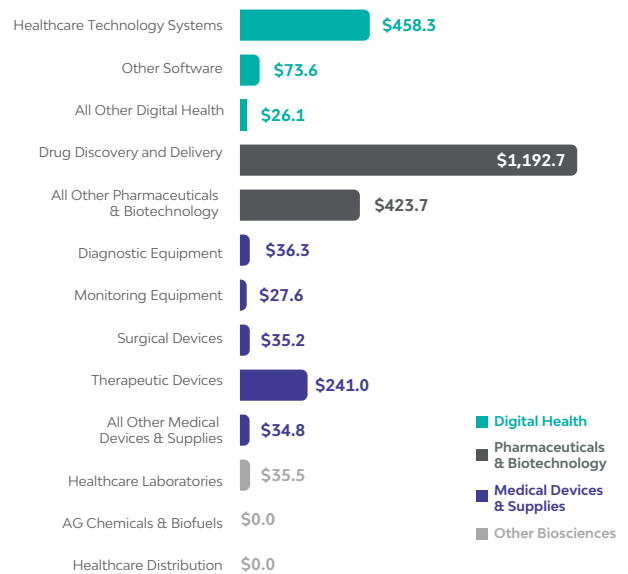
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

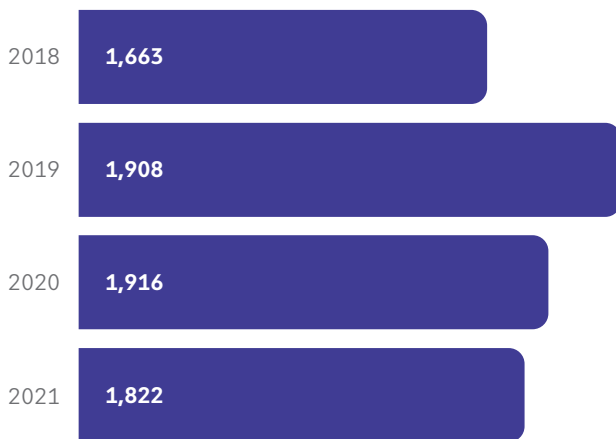
\$ Millions, 2018-2021



Bioscience Patents in New Jersey

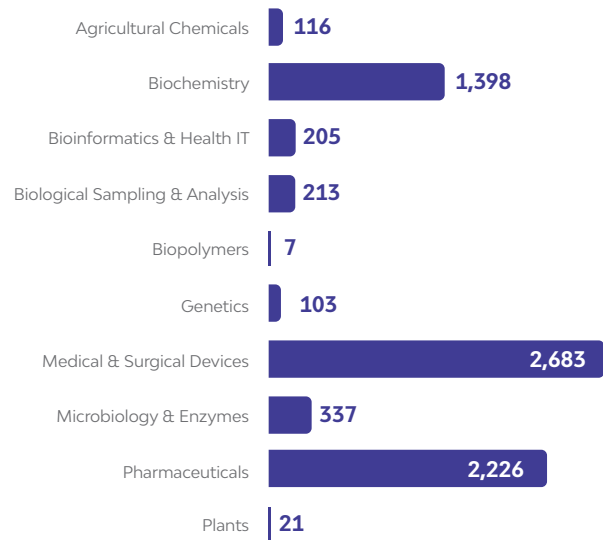
Bioscience-Related U.S. Patents

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.