



New York

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

New York's large bioscience industry has grown its employment base by 7 percent since 2018 to reach more than 110,000 jobs that span 5,314 business establishments in 2021. The state has a high, above-average employment concentration in the pharmaceuticals subsector of the industry. New York is a national leader in the size and breadth of its innovation ecosystem for the biosciences. The state is among the top tier in every key area, including academic R&D where its research universities spent \$4.7 billion in bioscience-related fields in 2020; in NIH funding awards, which have risen to \$3.2 billion in FY 2021; in venture capital investments which increased significantly in 2021; and in patents awarded to state inventors.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	New York	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	110,259	2,135,704	I
Bioscience Industry Location Quotient	0.85	n/a	III
Bioscience Industry Establishments	5,314	127,389	I
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$4,737,885	\$51,108,737	I
Bioscience Share of Total R&D	70%	63%	II
Bioscience R&D Per Capita	\$235	\$154	I
NIH Funding, FY 2021			
Funding (\$ thousands)	\$3,209,568	\$34,751,109	I
Funding Per Capita	\$162	\$105	I
Bioscience Venture Capital Investments, 2018-21 (\$ millions)			
	\$18,383.60	\$197,674.54	I
Bioscience-Related Patents, 2018-21			
	7,980	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.

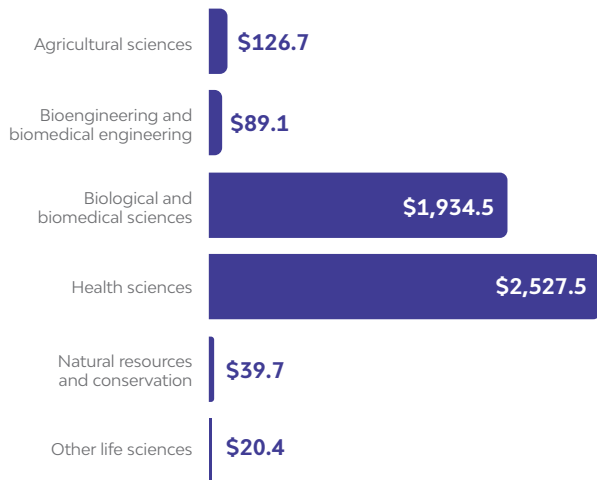
Industry Subsector		New York		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	36	2.9%	1,948	10.0%
	Employment	807	-3.4%	69,573	1.9%
	<i>Location Quotient</i>	0.19		n/a	
	Average Annual Wage	\$77,768	22.6%	\$91,989	13.1%
Bioscience- Related Distribution	Establishments	2,723	4.7%	62,697	14.7%
	Employment	31,819	2.8%	602,589	6.6%
	<i>Location Quotient</i>	0.87		n/a	
	Average Annual Wage	\$131,257	15.8%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	378	4.7%	10,268	17.4%
	Employment	11,616	-5.0%	398,847	5.5%
	<i>Location Quotient</i>	0.48		n/a	
	Average Annual Wage	\$79,477	9.8%	\$98,481	8.7%
Pharmaceuticals	Establishments	246	23.4%	5,973	34.7%
	Employment	24,061	11.7%	344,839	11.9%
	<i>Location Quotient</i>	1.15		n/a	
	Average Annual Wage	\$95,453	20.9%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	1,931	23.5%	46,503	34.5%
	Employment	41,955	12.3%	719,856	19.3%
	<i>Location Quotient</i>	0.96		n/a	
	Average Annual Wage	\$159,404	43.0%	\$147,396	22.0%
Total Bioscience Industry	Establishments	5,314	11.6%	127,389	22.3%
	Employment	110,259	7.1%	2,135,704	11.0%
	<i>Location Quotient</i>	0.85		n/a	
	Average Annual Wage	\$128,308	28.1%	\$125,750	16.4%
Total Private Sector	Establishments	647,826	4.0%	10,665,643	9.3%
	Employment	7,460,221	-6.9%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$89,519	21.8%	\$67,826	18.9%

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

Bioscience Research in New York

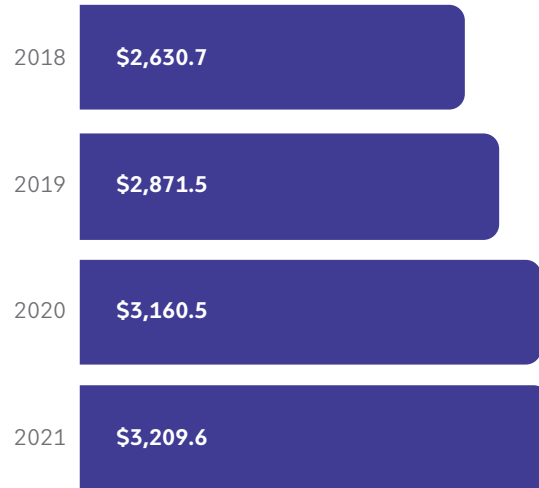
Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

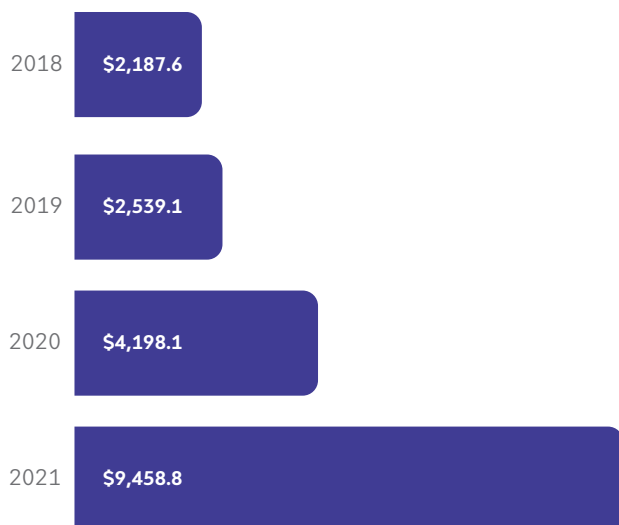
\$ Millions, FY 2018-2021



Bioscience Venture Capital in New York

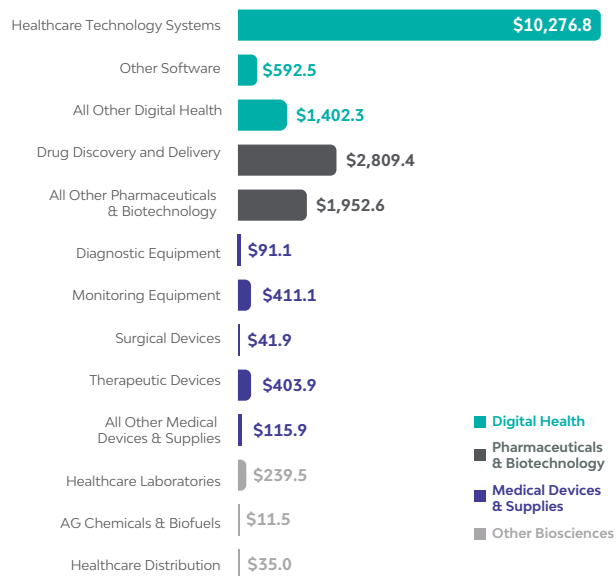
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

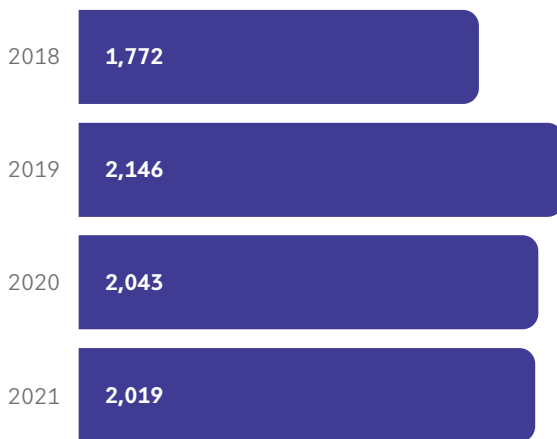
\$ Millions, 2018-2021



Bioscience Patents in New York

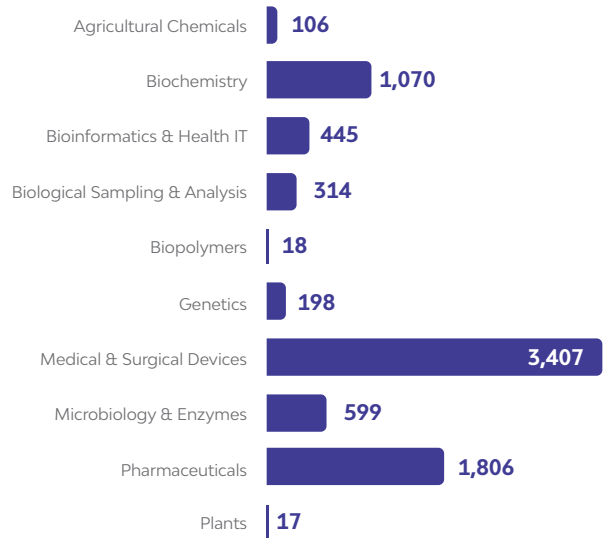
Bioscience-Related U.S. Patents

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.