



Vermont

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

Vermont's bioscience industry employment has grown by nearly 15 percent since 2018 to reach 2,747 jobs in 2021 that span 342 business establishments. Vermont has an above-average concentration in its employment in the medical devices and equipment subsector, accounting for approximately one-third of all bioscience jobs and a location quotient of 1.14. Vermont's \$143 million in bioscience academic R&D accounts for 79 percent of all science and engineering R&D in the state, which is a higher concentration than nearly every other state. NIH funding to Vermont institutions has been increasing and reached \$66 million in 2021.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Vermont	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	2,747	2,135,704	V
Bioscience Industry Location Quotient	0.66	n/a	IV
Bioscience Industry Establishments	342	127,389	V
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$143,380	\$51,108,737	IV
Bioscience Share of Total R&D	79%	63%	I
Bioscience R&D Per Capita	\$223	\$154	I
NIH Funding, FY 2021			
Funding (\$ thousands)	\$65,992	\$34,751,109	IV
Funding Per Capita	\$102	\$105	II
Bioscience Venture Capital Investments, 2018-21 (\$ millions)			
	\$22.38	\$197,674.54	V
Bioscience-Related Patents, 2018-21			
	259	153,072	V

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.

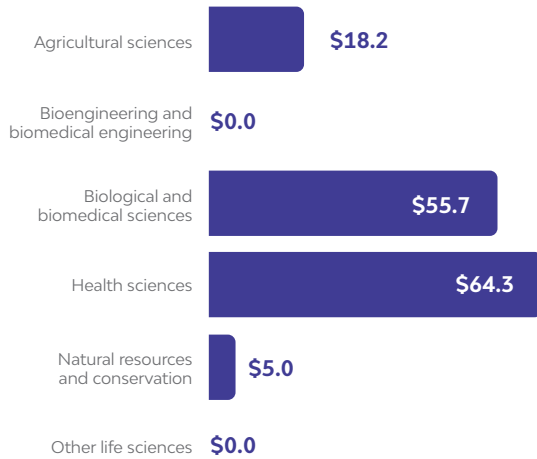
Industry Subsector		Vermont		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	6	-11.1%	1,948	10.0%
	Employment	50	-6.0%	69,573	1.9%
	<i>Location Quotient</i>	0.37		n/a	
	Average Annual Wage	\$46,524	2.2%	\$91,989	13.1%
Bioscience-Related Distribution	Establishments	196	16.4%	62,697	14.7%
	Employment	938	7.9%	602,589	6.6%
	<i>Location Quotient</i>	0.80		n/a	
	Average Annual Wage	\$96,261	10.3%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	18	20.0%	10,268	17.4%
	Employment	888	29.3%	398,847	5.5%
	<i>Location Quotient</i>	1.14		n/a	
	Average Annual Wage	\$71,447	6.6%	\$98,481	8.7%
Pharmaceuticals	Establishments	21	203.6%	5,973	34.7%
	Employment	462	-3.2%	344,839	11.9%
	<i>Location Quotient</i>	0.69		n/a	
	Average Annual Wage	\$86,262	6.6%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	101	71.1%	46,503	34.5%
	Employment	409	32.7%	719,856	19.3%
	<i>Location Quotient</i>	0.29		n/a	
	Average Annual Wage	\$133,800	63.1%	\$147,396	22.0%
Total Bioscience Industry	Establishments	342	33.7%	127,389	22.3%
	Employment	2,747	14.7%	2,135,704	11.0%
	<i>Location Quotient</i>	0.66		n/a	
	Average Annual Wage	\$91,235	16.1%	\$125,750	16.4%
Total Private Sector	Establishments	26,473	9.5%	10,665,643	9.3%
	Employment	241,198	-6.2%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$55,681	19.4%	\$67,826	18.9%

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

Bioscience Research in Vermont

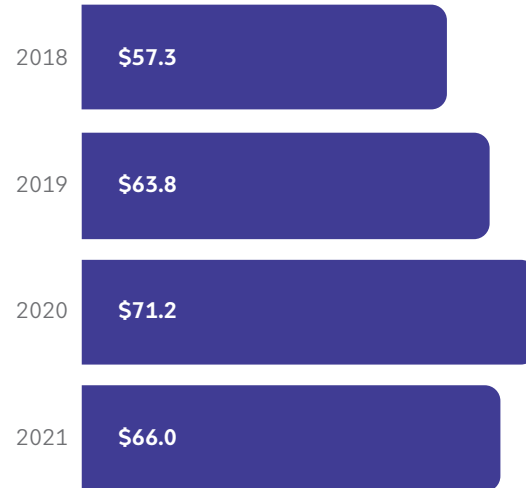
Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

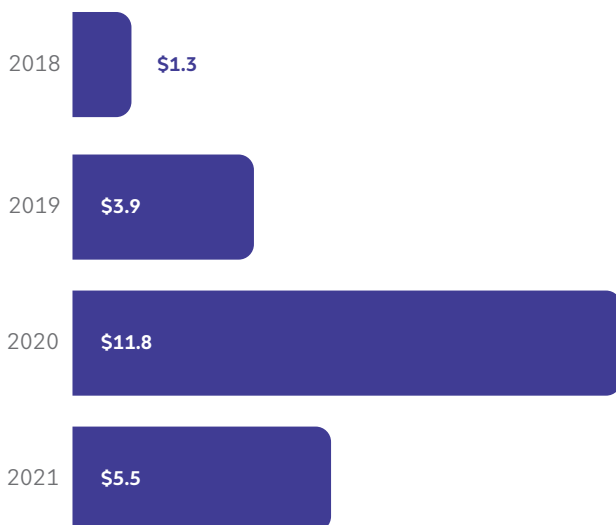
\$ Millions, FY 2018-2021



Bioscience Venture Capital in Vermont

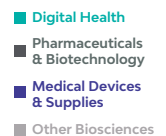
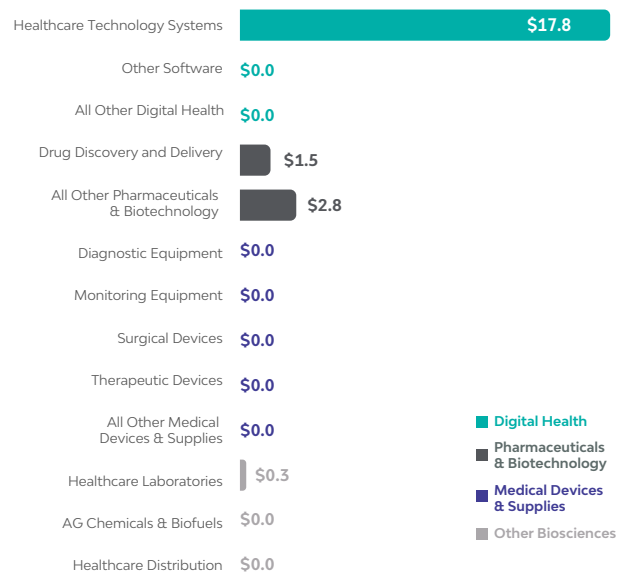
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

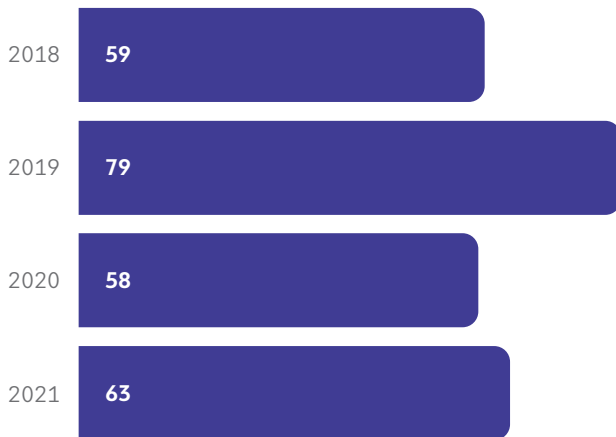
\$ Millions, 2018-2021



Bioscience Patents in Vermont

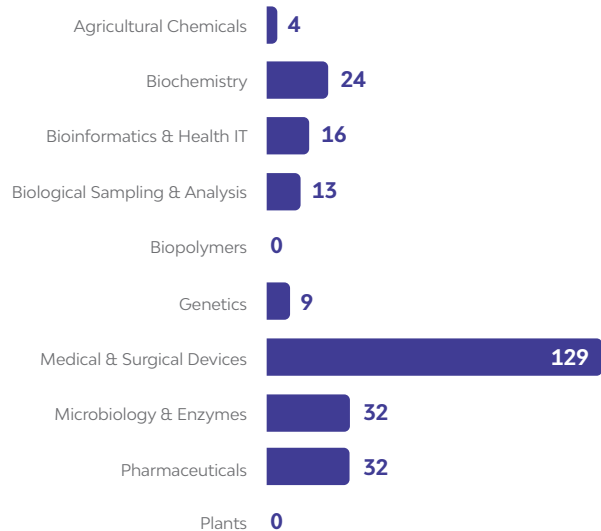
Bioscience-Related U.S. Patents

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.