



Iowa

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

Iowa's bioscience industry is sizable and among the most specialized in its concentration of industry employment. Since 2018, the industry has grown its industry employment base by 2 percent to reach 26,469 jobs in 2021 that span more than 1,800 business establishments. Four of the five bioscience subsectors contributed to the overall industry job growth. The industry in Iowa is 21 percent more concentrated relative to the national average (location quotient is 1.21). The state has a specialized employment base in two of the five major subsectors—Iowa is a national leader in the agricultural feedstock and industrial biosciences subsector and is specialized in its concentration of jobs in bioscience-related distribution. The state's research universities conducted nearly \$554 million in bioscience-related R&D in 2020, which translates into an above-average concentration on a per capita basis. Venture capital investments in Iowa bioscience companies increased significantly in 2021 with \$52 million invested.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Iowa	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	26,469	2,135,704	III
Bioscience Industry Location Quotient	1.21	n/a	II
Bioscience Industry Establishments	1,805	127,389	III
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$553,909	\$51,108,737	III
Bioscience Share of Total R&D	67%	63%	II
Bioscience R&D Per Capita	\$174	\$154	II
NIH Funding, FY 2021			
Funding (\$ thousands)	\$210,619	\$34,751,109	III
Funding Per Capita	\$66	\$105	III
Bioscience Venture Capital Investments, 2018-21 (\$ millions)			
	\$111.57	\$197,674.54	IV
Bioscience-Related Patents, 2018-21			
	1,874	153,072	III

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.

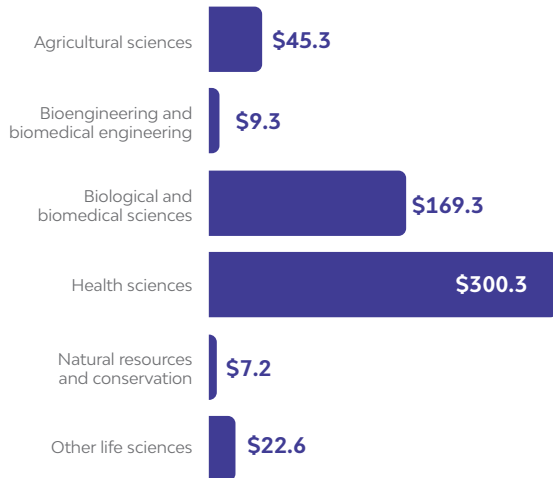
Industry Subsector		Iowa		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	136	8.6%	1,948	10.0%
	Employment	8,017	0.5%	69,573	1.9%
	<i>Location Quotient</i>	11.20		n/a	
	Average Annual Wage	\$83,878	9.6%	\$91,989	13.1%
Bioscience-Related Distribution	Establishments	1,267	9.6%	62,697	14.7%
	Employment	11,123	0.7%	602,589	6.6%
	<i>Location Quotient</i>	1.79		n/a	
	Average Annual Wage	\$95,084	13.0%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	60	-0.4%	10,268	17.4%
	Employment	1,291	-4.0%	398,847	5.5%
	<i>Location Quotient</i>	0.31		n/a	
	Average Annual Wage	\$59,462	-0.9%	\$98,481	8.7%
Pharmaceuticals	Establishments	50	-2.9%	5,973	34.7%
	Employment	3,710	11.2%	344,839	11.9%
	<i>Location Quotient</i>	1.05		n/a	
	Average Annual Wage	\$81,737	9.9%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	293	24.6%	46,503	34.5%
	Employment	2,330	6.4%	719,856	19.3%
	<i>Location Quotient</i>	0.31		n/a	
	Average Annual Wage	\$92,841	7.7%	\$147,396	22.0%
Total Bioscience Industry	Establishments	1,805	10.9%	127,389	22.3%
	Employment	26,469	2.2%	2,135,704	11.0%
	<i>Location Quotient</i>	1.21		n/a	
	Average Annual Wage	\$87,885	10.6%	\$125,750	16.4%
Total Private Sector	Establishments	100,278	3.7%	10,665,643	9.3%
	Employment	1,268,901	-3.1%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$54,177	15.1%	\$67,826	18.9%

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

Bioscience Research in Iowa

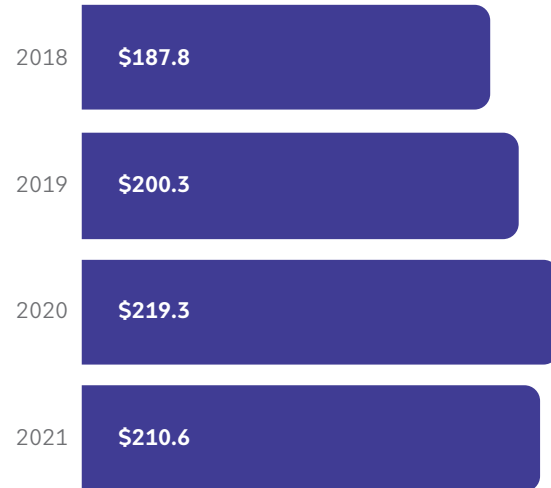
Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

\$ Millions, FY 2018-2021



Bioscience Venture Capital in Iowa

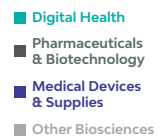
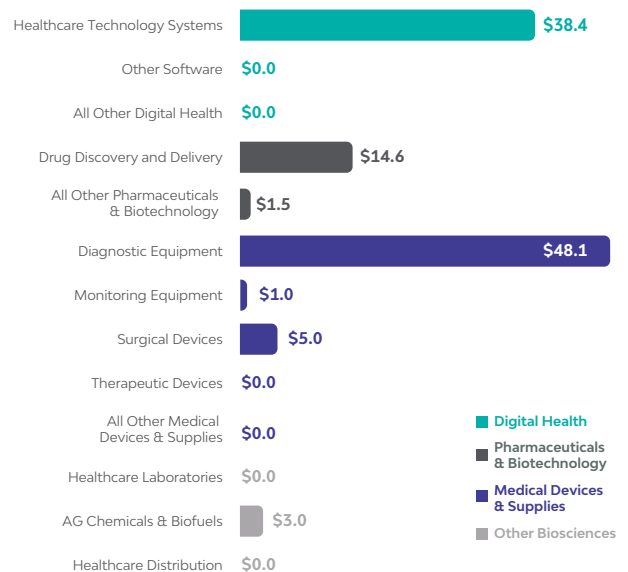
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

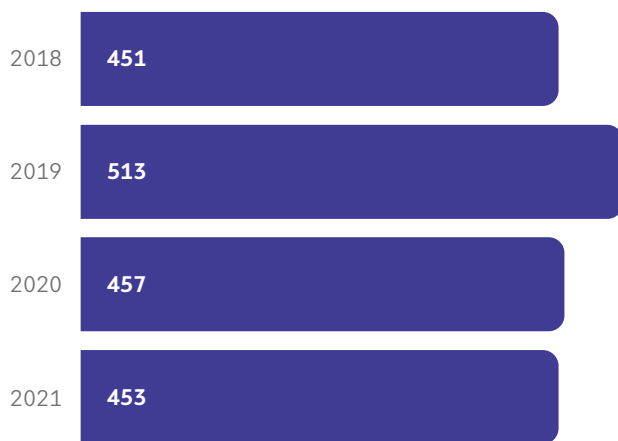
\$ Millions, 2018-2021



Bioscience Patents in Iowa

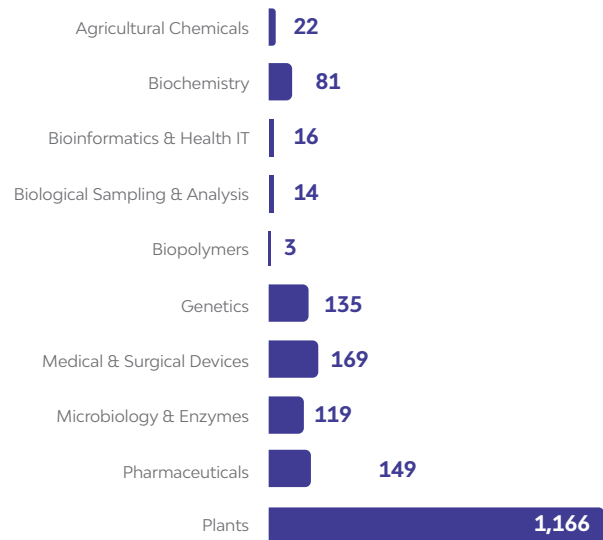
Bioscience-Related U.S. Patents

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.