



Colorado

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

Colorado's bioscience industry is sizable and growing, with an 11.6 percent employment increase since 2018 that essentially matched the national growth rate. The industry employed more than 38,000 in 2021 across 3,359 business establishments. Colorado has a specialized employment concentration in the medical devices and equipment subsector and a high concentration in bioscience-related distribution. The state's pharmaceuticals subsector has experienced particularly strong growth since 2018, increasing its employment base by 31 percent. Venture capital investments in Colorado bioscience firms increased significantly in 2021, reaching more than \$1.4 billion. Funding from NIH to Colorado institutions has been steadily rising and reached \$525 million in FY 2021.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Colorado	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	38,102	2,135,704	II
Bioscience Industry Location Quotient	0.97	n/a	II
Bioscience Industry Establishments	3,359	127,389	I
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$848,171	\$51,108,737	II
Bioscience Share of Total R&D	54%	63%	IV
Bioscience R&D Per Capita	\$147	\$154	II
NIH Funding, FY 2021			
Funding (\$ thousands)	\$525,228	\$34,751,109	II
Funding Per Capita	\$90	\$105	II
Bioscience Venture Capital Investments, 2018-21 (\$ millions)			
	\$3,413.22	\$197,674.54	I
Bioscience-Related Patents, 2018-21			
	3,429	153,072	II

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.

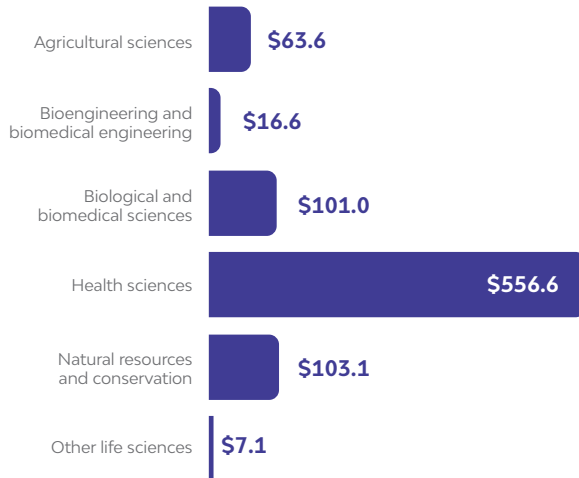
Industry Subsector		Colorado		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	30	5.4%	1,948	10.0%
	Employment	410	2.6%	69,573	1.9%
	<i>Location Quotient</i>	0.32		n/a	
	Average Annual Wage	\$66,105	22.7%	\$91,989	13.1%
Bioscience-Related Distribution	Establishments	1,978	12.2%	62,697	14.7%
	Employment	12,875	11.4%	602,589	6.6%
	<i>Location Quotient</i>	1.16		n/a	
	Average Annual Wage	\$134,937	18.3%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	161	-4.9%	10,268	17.4%
	Employment	9,553	-2.6%	398,847	5.5%
	<i>Location Quotient</i>	1.30		n/a	
	Average Annual Wage	\$109,333	21.8%	\$98,481	8.7%
Pharmaceuticals	Establishments	239	52.6%	5,973	34.7%
	Employment	5,601	31.2%	344,839	11.9%
	<i>Location Quotient</i>	0.88		n/a	
	Average Annual Wage	\$93,905	26.0%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	952	38.2%	46,503	34.5%
	Employment	9,663	19.1%	719,856	19.3%
	<i>Location Quotient</i>	0.73		n/a	
	Average Annual Wage	\$117,113	19.2%	\$147,396	22.0%
Total Bioscience Industry	Establishments	3,359	19.7%	127,389	22.3%
	Employment	38,102	11.6%	2,135,704	11.0%
	<i>Location Quotient</i>	0.97		n/a	
	Average Annual Wage	\$117,225	20.0%	\$125,750	16.4%
Total Private Sector	Establishments	225,995	12.0%	10,665,643	9.3%
	Employment	2,278,668	1.0%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$71,522	20.6%	\$67,826	18.9%

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

Bioscience Research in Colorado

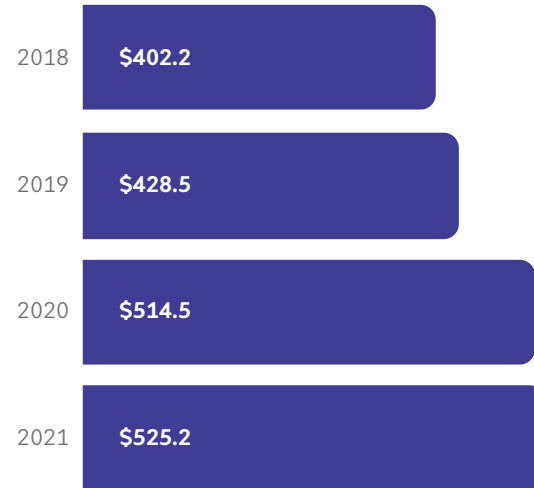
Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

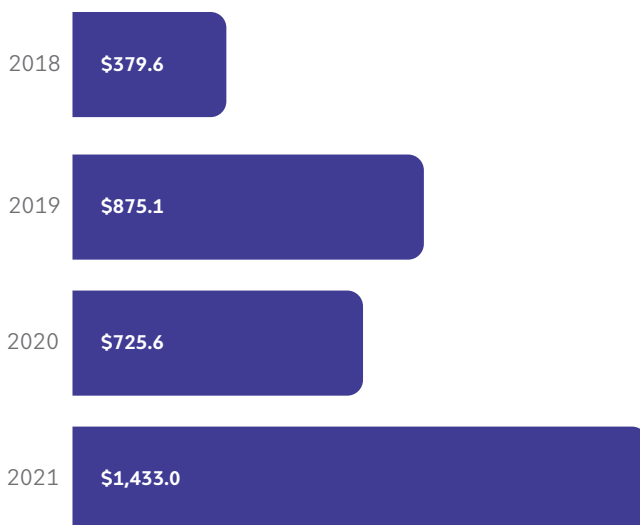
\$ Millions, FY 2018-2021



Bioscience Venture Capital in Colorado

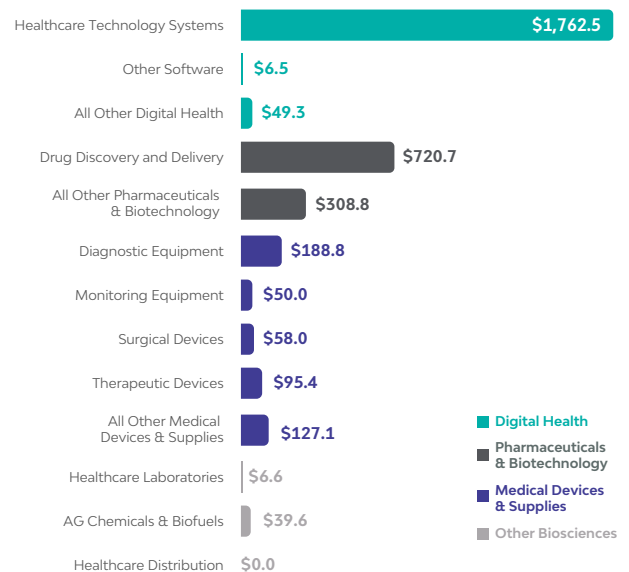
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

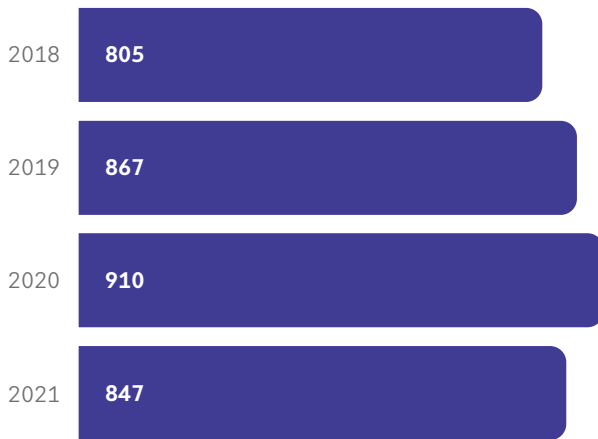
\$ Millions, 2018-2021



Bioscience Patents in Colorado

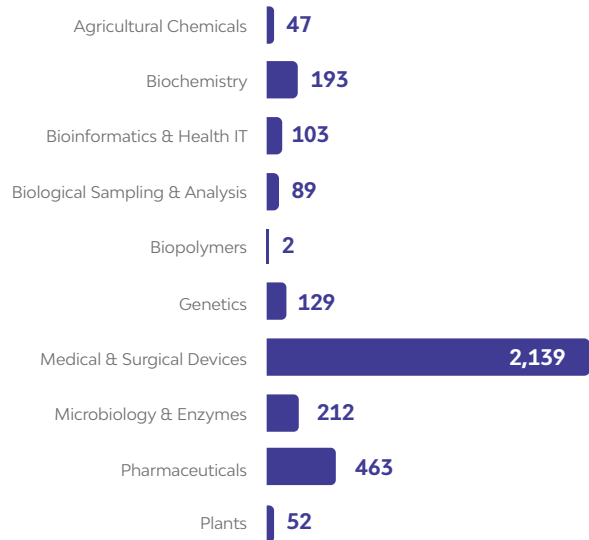
Bioscience-Related U.S. Patents

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.