

Alaska's bioscience industry is modest in size but growing, with 1,147 jobs that span 171 individual state business establishments. Bioscience industry employment grew by 7.1 percent from 2018 through 2021 in the state, led by strong growth in Alaska's largest subsector—research, testing and medical laboratories. Bioscience jobs pay well above the average private sector wage with bioscience workers earning more than \$72,000, on average, compared with \$61,866 for the overall private sector. NIH funding to state institutions has grown in recent years, reaching \$19.0 million in FY 2021.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Alaska	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	1,147	2,135,704	V
Bioscience Industry Location Quotient	0.29	n/a	V
Bioscience Industry Establishments	171	127,389	V
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$36,878	\$51,108,737	V
Bioscience Share of Total R&D	21%	63%	V
Bioscience R&D Per Capita	\$50	\$154	V
NIH Funding, FY 2021			
Funding (\$ thousands)	\$19,036	\$34,751,109	V
Funding Per Capita	\$26	\$105	V
Bioscience Venture Capital Investments, 2018-21 (\$ millions)	\$2.50	\$197,674.54	V
Bioscience-Related Patents, 2018-21	53	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.

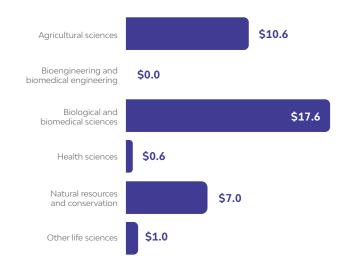
Industry Subsector		Alaska		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	1	-50.0%	1,948	10.0%
	Employment	0	-94.7%	69,573	1.9%
	Location Quotient	0.00		n/a	
	Average Annual Wage	\$57,859	88.0%	\$91,989	13.1%
Bioscience- Related Distribution	Establishments	90	11.5%	62,697	14.7%
	Employment	396	-7.1%	602,589	6.6%
	Location Quotient	0.35		n/a	
	Average Annual Wage	\$89,350	8.4%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	18	26.8%	10,268	17.4%
	Employment	45	-43.1%	398,847	5.5%
	Location Quotient	0.06		n/a	
	Average Annual Wage	\$85,193	-15.6%	\$98,481	8.7%
Pharmaceuticals	Establishments	5	50.0%	5,973	34.7%
	Employment	17	7.9%	344,839	11.9%
	Location Quotient	0.03		n/a	
	Average Annual Wage	\$69,414	6.1%	\$126,153	10.3%
	Establishments	58	38.3%	46,503	34.5%
Research, Testing, and Medical Laboratories	Employment	689	26.6%	719,856	19.3%
	Location Quotient	0.51		n/a	
	Average Annual Wage	\$62,203	11.9%	\$147,396	22.0%
Total Bioscience Industry	Establishments	171	21.0%	127,389	22.3%
	Employment	1,147	7.1%	2,135,704	11.0%
	Location Quotient	0.29		n/a	
	Average Annual Wage	\$72,574	4.3%	\$125,750	16.4%
Total Private Sector	Establishments	21,538	8.3%	10,665,643	9.3%
	Employment	232,447	-5.6%	123,376,557	-1.5%
	Location Quotient	1.00		n/a	
	Average Annual Wage	\$61,866	13.7%	\$67,826	18.9%

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

Bioscience Research in Alaska

Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



NIH Awards

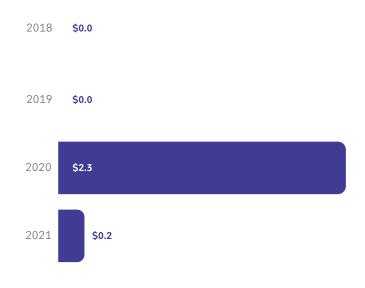
\$ Millions, FY 2018-2021



Bioscience Venture Capital in Alaska

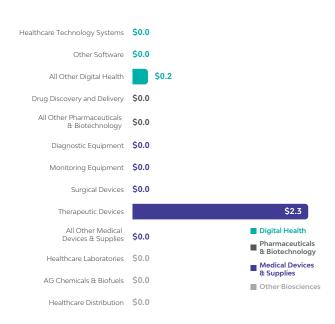
Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



Bioscience-Related Venture Capital Investments by Segment

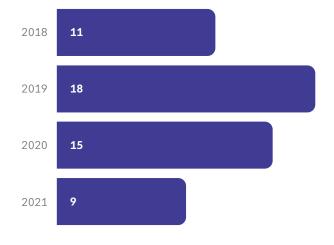
\$ Millions, 2018-2021



Bioscience Patents in Alaska

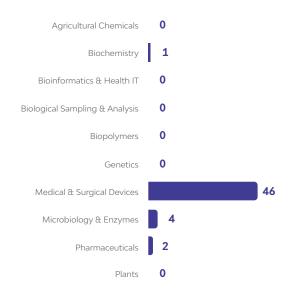
Bioscience-Related U.S. Patents

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.



