

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

Utah's bioscience industry is highly specialized in its concentration, diverse in its strengths, and is growing. Industry employers in Utah have increased employment by 17 percent since 2018, outpacing the national growth rate to reach 40,419 total jobs in 2021, while operating 1,845 business establishments. Four of the five industry subsectors in the state have increased employment and contributed to the overall job gains. Utah's bioscience industry employment is one of the most highly concentrated in the nation, with a location quotient of 1.74, or 74 percent above the national average. Three of the state's industry subsectors are specialized in their concentration—medical devices and equipment; pharmaceuticals; and research, testing, and medical labs. Venture capital investments in Utah bioscience companies have increased steadily and significantly in recent years and in 2021 totaled nearly \$900 million.

### Bioscience Performance Metrics

### Summary of State Performance in Selected Bioscience-related Metrics

Metric	Utah	United States	Quintile
Bioscience Industry, 2021			
Bioscience Industry Employment	40,419	2,135,704	II
Bioscience Industry Location Quotient	1.74	n/a	1
Bioscience Industry Establishments	1,845	127,389	III
Academic Bioscience R&D Expenditures, FY 2020			
Bioscience R&D (\$ thousands)	\$479,050	\$51,108,737	III
Bioscience Share of Total R&D	53%	63%	IV
Bioscience R&D Per Capita	\$146	\$154	II
NIH Funding, FY 2021			
Funding (\$ thousands)	\$254,846	\$34,751,109	III
Funding Per Capita	\$76	\$105	III
Bioscience Venture Capital Investments, 2018-21 (\$ millions)	\$2,199.56	\$197,674.54	II
Bioscience-Related Patents, 2018-21	1,868	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.

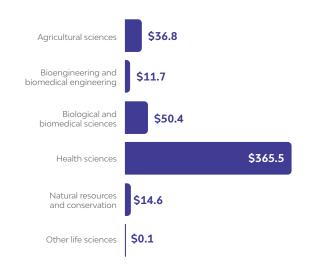
Industry Subsector			Utah		United States		
		2021	<b>2018–2021</b> Change	2021	2018-2021 Change		
Agricultural Feedstock and Industrial Biosciences	Establishments	15	7.0%	1,948	10.0%		
	Employment	72	-17.4%	69,573	1.9%		
	Location Quotient	0.10		n/a			
	Average Annual Wage	\$68,391	31.3%	\$91,989	13.1%		
Bioscience- Related Distribution	Establishments	900	15.8%	62,697	14.7%		
	Employment	6,807	5.0%	602,589	6.6%		
	Location Quotient	1.04		n/a			
	Average Annual Wage	\$109,358	15.8%	\$121,606	15.0%		
Medical Devices and Equipment	Establishments	208	13.5%	10,268	17.4%		
	Employment	14,392	14.5%	398,847	5.5%		
	Location Quotient	3.31		n/a			
	Average Annual Wage	\$72,789	8.6%	\$98,481	8.7%		
Pharmaceuticals	Establishments	153	25.4%	5,973	34.7%		
	Employment	7,748	17.0%	344,839	11.9%		
	Location Quotient	2.06		n/a			
	Average Annual Wage	\$63,673	4.5%	\$126,153	10.3%		
Research, Testing, and Medical Laboratories	Establishments	568	47.6%	46,503	34.5%		
	Employment	11,399	30.3%	719,856	19.3%		
	Location Quotient	1.45		n/a			
	Average Annual Wage	\$86,233	17.2%	\$147,396	22.0%		
Total Bioscience Industry	Establishments	1,845	24.5%	127,389	22.3%		
	Employment	40,419	17.1%	2,135,704	11.0%		
	Location Quotient	1.74		n/a			
	Average Annual Wage	\$80,984	11.5%	\$125,750	16.4%		
Total Private Sector	Establishments	117,494	18.0%	10,665,643	9.3%		
	Employment	1,344,183	7.8%	123,376,557	-1.5%		
	Location Quotient	1.00		n/a			
	Average Annual Wage	\$58,288	20.0%	\$67,826	18.9%		

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

### Bioscience Research in Utah

### **Bioscience Academic R&D Expenditures**

\$ Millions, FY 2020



#### **NIH Awards**

\$ Millions, FY 2018-2021



## Bioscience Venture Capital in Utah

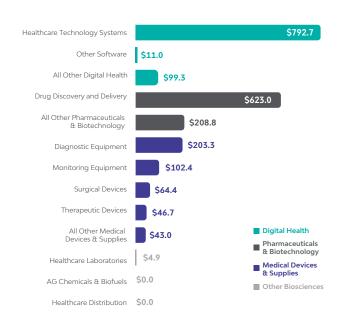
# Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



### Bioscience-Related Venture Capital Investments by Segment

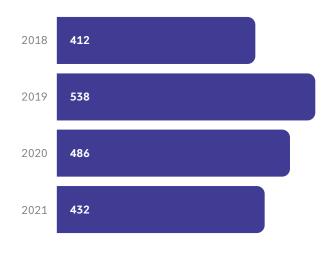
\$ Millions, 2018-2021



### Bioscience Patents in Utah

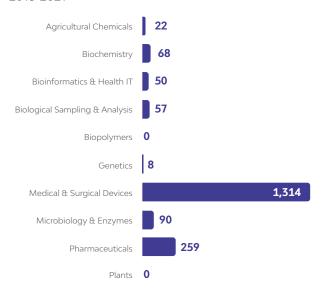
### Bioscience-Related U.S. Patents

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.



