



# Arkansas

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

Arkansas' bioscience industry is growing at a strong rate, increasing its employment base by 12 percent since 2018 to reach more than 10,000 jobs in 2021. Four of the five major subsectors contributed to the overall industry growth. State firms operate 1,316 business establishments, a figure which has also grown rapidly since 2018. Arkansas has a specialized concentration of jobs in agricultural feedstock and industrial biosciences with a location quotient of 1.47. The state's universities have a strong R&D focus in bioscience-related fields, with 81 percent of academic research expenditures in these areas. NIH awards to Arkansas institutions have been steadily increasing, reaching \$92 million in FY 2021.

## Bioscience Performance Metrics

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

Metric	Arkansas	United States	Quintile
<b>Bioscience Industry, 2021</b>			
Bioscience Industry Employment	10,177	2,135,704	IV
Bioscience Industry Location Quotient	0.58	n/a	IV
Bioscience Industry Establishments	1,316	127,389	III
<b>Academic Bioscience R&amp;D Expenditures, FY 2020</b>			
Bioscience R&D (\$ thousands)	\$278,153	\$51,108,737	IV
Bioscience Share of Total R&D	81%	63%	I
Bioscience R&D Per Capita	\$92	\$154	IV
<b>NIH Funding, FY 2021</b>			
Funding (\$ thousands)	\$92,053	\$34,751,109	IV
Funding Per Capita	\$30	\$105	V
<b>Bioscience Venture Capital Investments, 2018-21 (\$ millions)</b>			
	\$74.02	\$197,674.54	IV
<b>Bioscience-Related Patents, 2018-21</b>			
	322	153,072	IV

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.

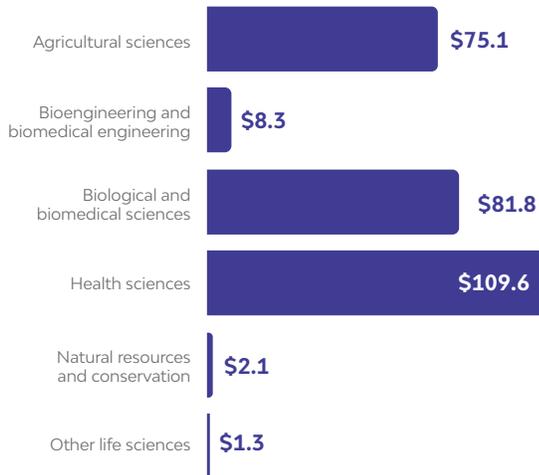
Industry Subsector		Arkansas		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	22	21.9%	1,948	10.0%
	Employment	841	20.7%	69,573	1.9%
	<i>Location Quotient</i>	1.47		n/a	
	Average Annual Wage	\$68,833	9.3%	\$91,989	13.1%
Bioscience- Related Distribution	Establishments	928	32.6%	62,697	14.7%
	Employment	5,382	9.0%	602,589	6.6%
	<i>Location Quotient</i>	1.09		n/a	
	Average Annual Wage	\$95,431	17.8%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	53	67.5%	10,268	17.4%
	Employment	1,397	17.2%	398,847	5.5%
	<i>Location Quotient</i>	0.43		n/a	
	Average Annual Wage	\$46,142	-0.3%	\$98,481	8.7%
Pharmaceuticals	Establishments	34	63.4%	5,973	34.7%
	Employment	455	-11.0%	344,839	11.9%
	<i>Location Quotient</i>	0.16		n/a	
	Average Annual Wage	\$67,814	33.0%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	279	32.0%	46,503	34.5%
	Employment	2,102	20.1%	719,856	19.3%
	<i>Location Quotient</i>	0.36		n/a	
	Average Annual Wage	\$67,549	7.4%	\$147,396	22.0%
Total Bioscience Industry	Establishments	1,316	34.0%	127,389	22.3%
	Employment	10,177	12.0%	2,135,704	11.0%
	<i>Location Quotient</i>	0.58		n/a	
	Average Annual Wage	\$79,472	13.7%	\$125,750	16.4%
Total Private Sector	Establishments	91,596	6.2%	10,665,643	9.3%
	Employment	1,012,955	-0.1%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$51,637	18.1%	\$67,826	18.9%

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

## Bioscience Research in Arkansas

### Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



### NIH Awards

\$ Millions, FY 2018-2021



## Bioscience Venture Capital in Arkansas

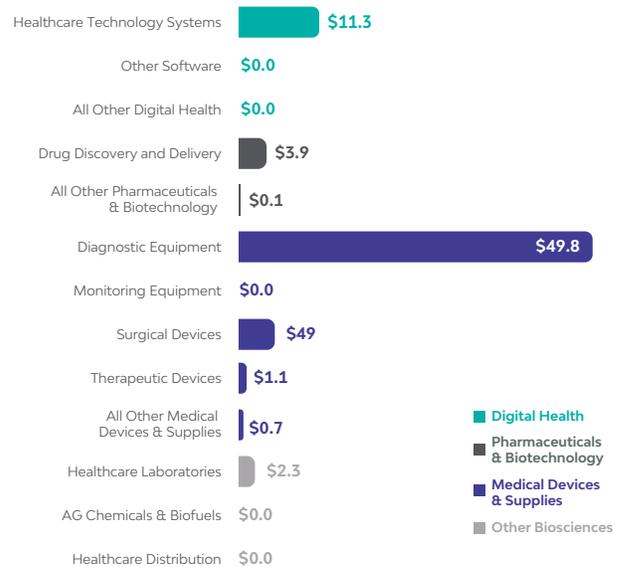
### Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



### Bioscience-Related Venture Capital Investments by Segment

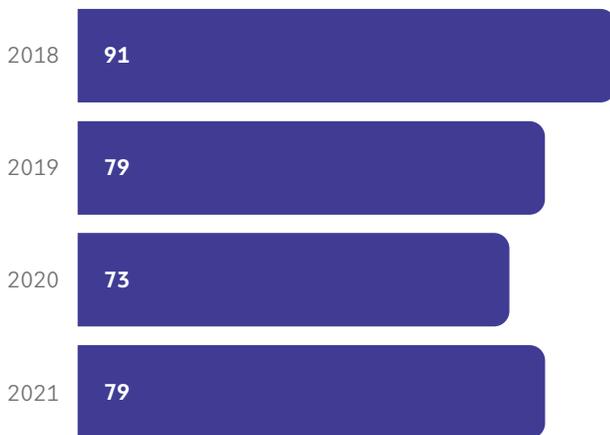
\$ Millions, 2018-2021



## Bioscience Patents in Arkansas

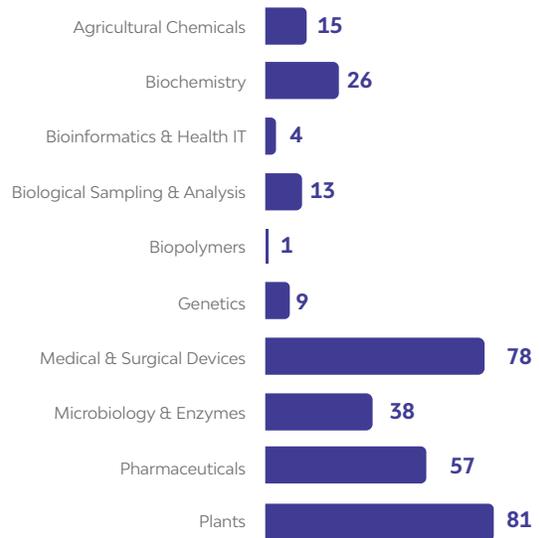
### Bioscience-Related U.S. Patents

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.*