



# Wisconsin

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

Wisconsin's bioscience industry has grown its employment base by 12 percent since 2018, just outpacing national industry growth to reach more than 42,000 jobs in 2021 that span 2,152 state business establishments. Within the industry, all five of the major subsectors contributed to the overall job gains. Wisconsin has a specialized employment concentration in two of its industry subsectors—medical devices and equipment and agricultural feedstock and industrial biosciences. State research institutions have seen increases in NIH funding awards which totaled \$554 million in 2021. These federal awards represent a key funding source for the state's \$1.2 billion in academic biosciences R&D expenditures. Wisconsin's universities have a strong concentration in biosciences research, accounting for 71 percent of all academic R&D activity, which is well above the national average.

## Bioscience Performance Metrics

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

Metric	Wisconsin	United States	Quintile
<b>Bioscience Industry, 2021</b>			
Bioscience Industry Employment	42,483	2,135,704	II
Bioscience Industry Location Quotient	1.01	n/a	II
Bioscience Industry Establishments	2,152	127,389	III
<b>Academic Bioscience R&amp;D Expenditures, FY 2020</b>			
Bioscience R&D (\$ thousands)	\$1,155,837	\$51,108,737	II
Bioscience Share of Total R&D	71%	63%	II
Bioscience R&D Per Capita	\$196	\$154	I
<b>NIH Funding, FY 2021</b>			
Funding (\$ thousands)	\$554,224	\$34,751,109	II
Funding Per Capita	\$94	\$105	II
<b>Bioscience Venture Capital Investments, 2018-21 (\$ millions)</b>			
	\$574.56	\$197,674.54	III
<b>Bioscience-Related Patents, 2018-21</b>			
	2,682	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.

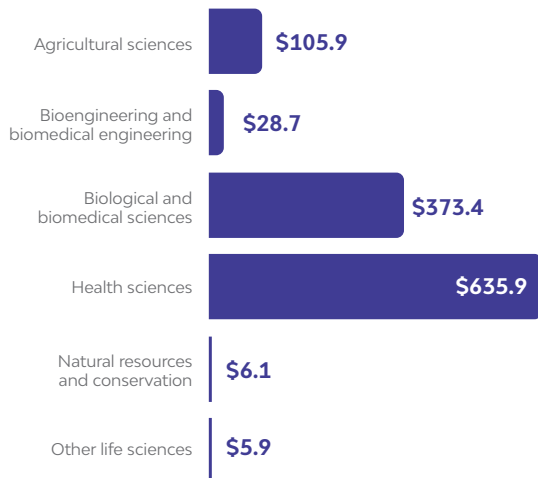
Industry Subsector		Wisconsin		United States	
		2021	2018–2021 Change	2021	2018–2021 Change
Agricultural Feedstock and Industrial Biosciences	Establishments	49	-6.2%	1,948	10.0%
	Employment	1,829	6.0%	69,573	1.9%
	<i>Location Quotient</i>	1.33		n/a	
	Average Annual Wage	\$69,024	12.9%	\$91,989	13.1%
Bioscience- Related Distribution	Establishments	1,455	16.2%	62,697	14.7%
	Employment	12,430	2.8%	602,589	6.6%
	<i>Location Quotient</i>	1.05		n/a	
	Average Annual Wage	\$101,631	16.6%	\$121,606	15.0%
Medical Devices and Equipment	Establishments	155	-3.9%	10,268	17.4%
	Employment	10,379	0.5%	398,847	5.5%
	<i>Location Quotient</i>	1.32		n/a	
	Average Annual Wage	\$94,899	4.5%	\$98,481	8.7%
Pharmaceuticals	Establishments	92	8.6%	5,973	34.7%
	Employment	6,007	21.9%	344,839	11.9%
	<i>Location Quotient</i>	0.88		n/a	
	Average Annual Wage	\$90,978	14.0%	\$126,153	10.3%
Research, Testing, and Medical Laboratories	Establishments	402	35.5%	46,503	34.5%
	Employment	11,838	34.0%	719,856	19.3%
	<i>Location Quotient</i>	0.83		n/a	
	Average Annual Wage	\$94,723	10.7%	\$147,396	22.0%
Total Bioscience Industry	Establishments	2,152	16.6%	127,389	22.3%
	Employment	42,483	12.1%	2,135,704	11.0%
	<i>Location Quotient</i>	1.01		n/a	
	Average Annual Wage	\$95,151	11.1%	\$125,750	16.4%
Total Private Sector	Establishments	180,984	8.0%	10,665,643	9.3%
	Employment	2,431,793	-2.6%	123,376,557	-1.5%
	<i>Location Quotient</i>	1.00		n/a	
	Average Annual Wage	\$56,665	15.8%	\$67,826	18.9%

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

## Bioscience Research in Wisconsin

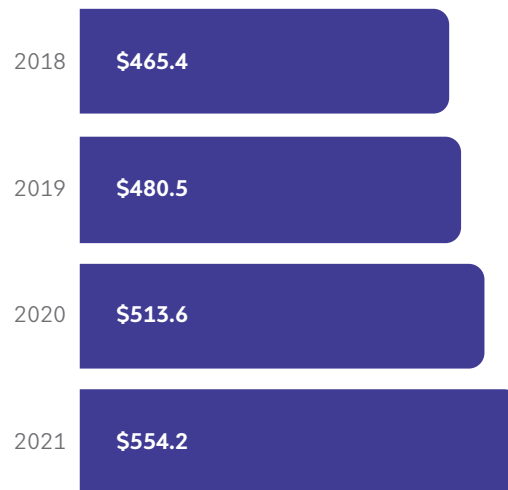
### Bioscience Academic R&D Expenditures

\$ Millions, FY 2020



### NIH Awards

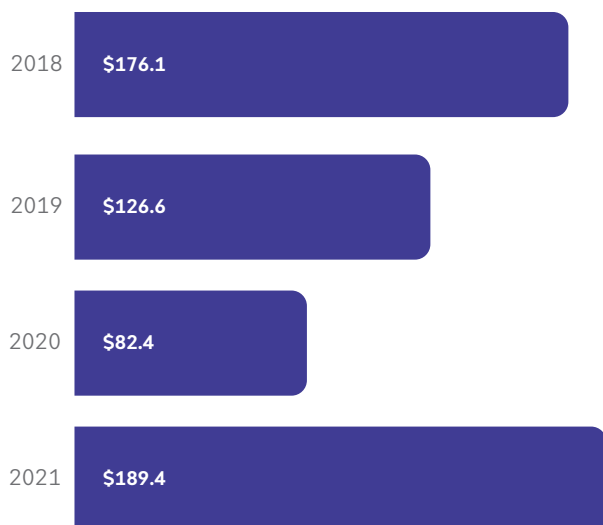
\$ Millions, FY 2018-2021



## Bioscience Venture Capital in Wisconsin

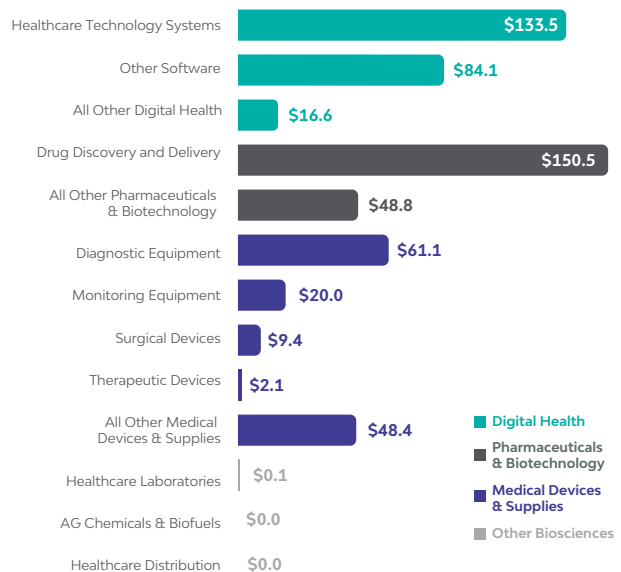
### Bioscience-Related Venture Capital Investments

\$ Millions, 2018-2021



### Bioscience-Related Venture Capital Investments by Segment

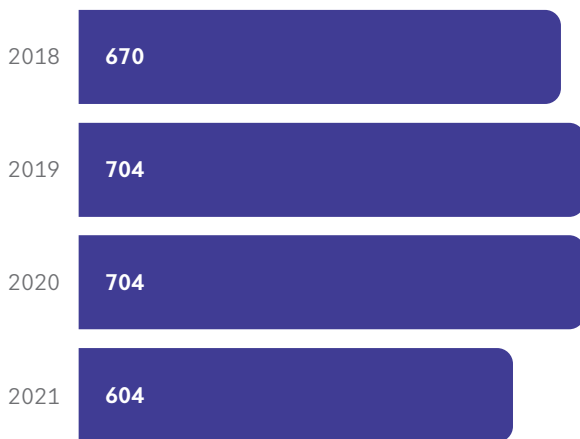
\$ Millions, 2018-2021



## Bioscience Patents in Wisconsin

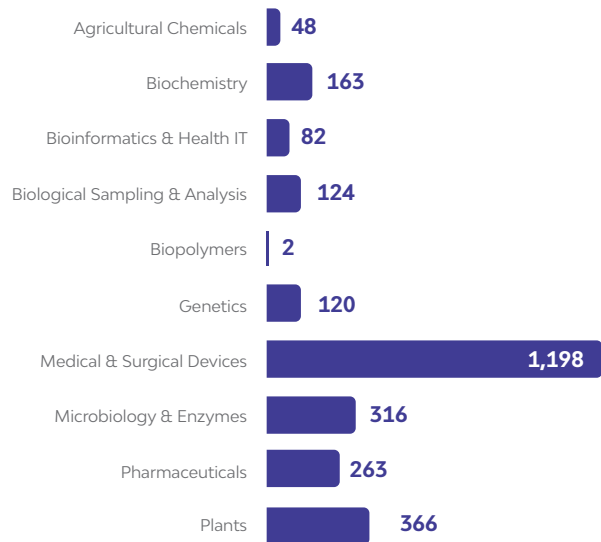
### Bioscience-Related U.S. Patents

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.*