



# Nebraska

The Bioscience Economy: Propelling Life-Saving Treatments, Supporting State & Local Communities

Nebraska’s bioscience industry is specialized in its employment concentration, diverse in its strengths, and growing its base. The industry has grown by 4.5 percent since 2016 and in 2018 employed 17,629 across 1,309 business establishments. Bioscience employment is 45 percent more concentrated in Nebraska compared with the national average—its location quotient is 1.45. Within the industry, the state is specialized in its concentrations of three industry subsectors—agricultural feedstock and industrial biosciences; bioscience-related distribution; and medical device manufacturing. The state’s research universities conducted nearly \$374 million in bioscience-related R&D in 2018. Nebraska has a particularly strong focus in biosciences research across its universities, accounting for 75 percent of all academic R&D. NIH funding awards to Nebraska institutions have been increasing in recent years and reached nearly \$128 million in 2019.

## Bioscience Performance Metrics

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

Metric	Nebraska	United States	Quintile
<b>Bioscience Industry, 2018</b>			
Bioscience Industry Employment	17,629	1,869,955	III
Bioscience Industry Location Quotient	1.45	n/a	I
Bioscience Industry Establishments	1,309	101,143	III
<b>Academic Bioscience R&amp;D Expenditures, FY 2018</b>			
Academic Bioscience R&D (\$ thousands)	\$373,608	\$47,183,197	III
Bioscience Share of Total Academic R&D	75%	63%	I
Academic Bioscience R&D Per Capita	\$194	\$144	I
<b>NIH Funding, FY 2019</b>			
Funding (\$ thousands)	\$127,535	\$30,886,675	IV
Funding Per Capita	\$66	\$94	III
<b>Bioscience Venture Capital Investments, 2016-19 (\$ millions)</b>	\$56.26	\$102,728.33	IV
<b>Bioscience-Related Patents, 2016-19</b>	578	108,438	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.



# Nebraska

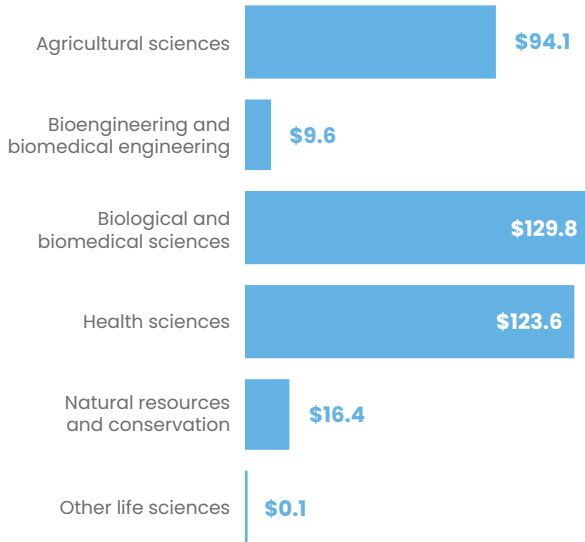
Industry Subsector	Nebraska		United States	
	2018	2016–2018 Change	2018	2016–2018 Change
<b>Agricultural Feedstock and Industrial Biosciences</b>				
Establishments	54	0.0%	1,785	4.4%
Employment	2,828	-1.6%	68,642	0.9%
Location Quotient	6.32		n/a	
Direct-Effect Employment Multiplier	6.92			
Total Employment Impact	19,559			
Average Annual Wage	\$70,004	6.1%	\$83,151	2.7%
<b>Bioscience-Related Distribution</b>				
Establishments	1,061	17.3%	51,582	31.8%
Employment	7,038	11.4%	545,055	16.1%
Location Quotient	1.98		n/a	
Direct-Effect Employment Multiplier	2.90			
Total Employment Impact	20,425			
Average Annual Wage	\$76,507	15.1%	\$105,905	13.1%
<b>Drugs and Pharmaceuticals</b>				
Establishments	25	4.2%	4,451	18.6%
Employment	1,911	12.9%	308,357	3.1%
Location Quotient	0.95		n/a	
Direct-Effect Employment Multiplier	3.39			
Total Employment Impact	6,474			
Average Annual Wage	\$77,711	10.3%	\$113,544	-0.2%
<b>Medical Devices and Equipment</b>				
Establishments	30	25.0%	8,753	8.3%
Employment	4,344	8.7%	378,431	5.3%
Location Quotient	1.76		n/a	
Direct-Effect Employment Multiplier	2.53			
Total Employment Impact	11,003			
Average Annual Wage	\$57,325	2.7%	\$90,541	6.8%
<b>Research, Testing, and Medical Laboratories</b>				
Establishments	139	-11.9%	34,572	4.7%
Employment	1,507	-24.4%	569,470	4.0%
Location Quotient	0.41		n/a	
Direct-Effect Employment Multiplier	2.24			
Total Employment Impact	3,376			
Average Annual Wage	\$64,851	0.1%	\$120,320	12.5%
<b>Total Bioscience Industry</b>				
Establishments	1,309	12.5%	101,143	18.0%
Employment	17,629	4.5%	1,869,955	7.2%
Location Quotient	1.45		n/a	
Direct-Effect Employment Multiplier	3.45			
Total Employment Impact	60,837			
Average Annual Wage	\$69,871	9.1%	\$107,610	8.7%
<b>Total Private Sector</b>				
Establishments	68,014	-1.7%	9,776,674	3.1%
Employment	816,687	1.1%	125,195,944	3.3%
Average Annual Wage	\$45,856	6.4%	\$57,043	6.9%

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

## Bioscience Research in Nebraska

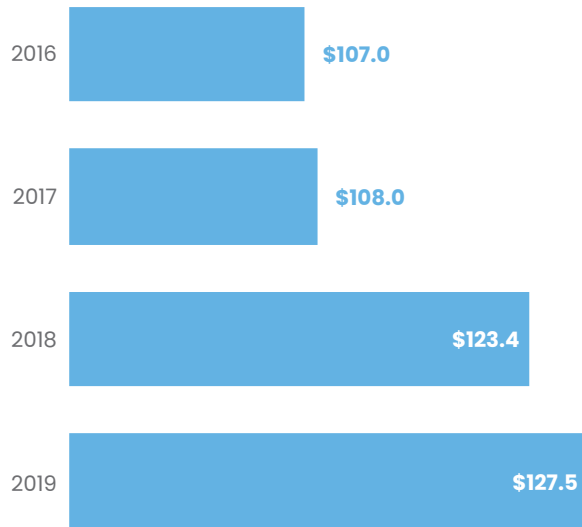
### Bioscience Academic R&D Expenditures

\$ Millions, FY 2018



### NIH Awards

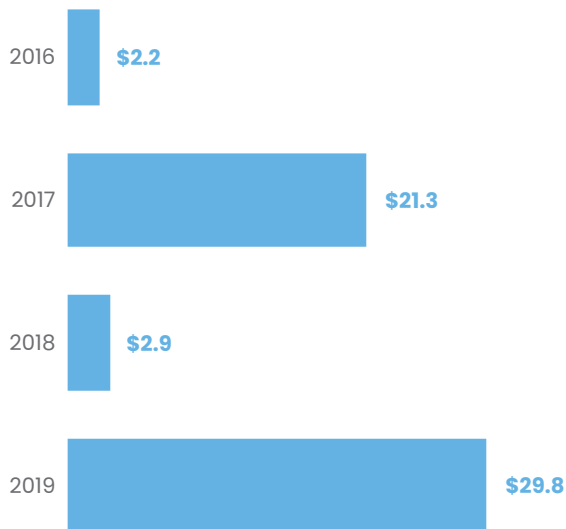
\$ Millions, FY 2016-2019



## Bioscience Venture Capital in Nebraska

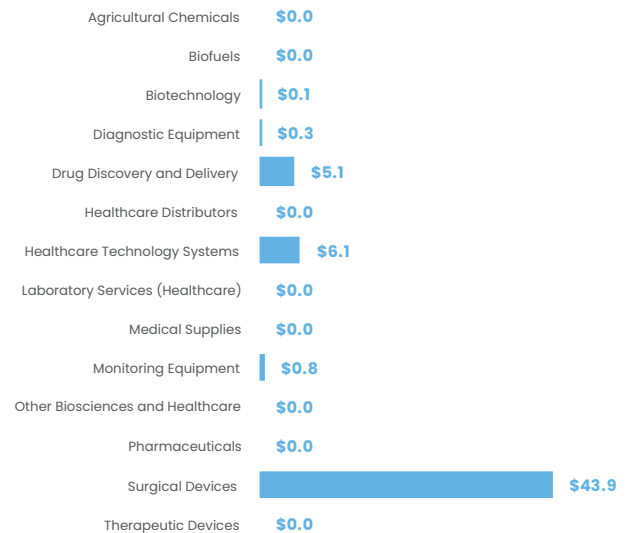
### Bioscience-Related Venture Capital Investments

\$ Millions, 2016-2019



### Bioscience-Related Venture Capital Investments by Segment

\$ Millions, 2016-2019

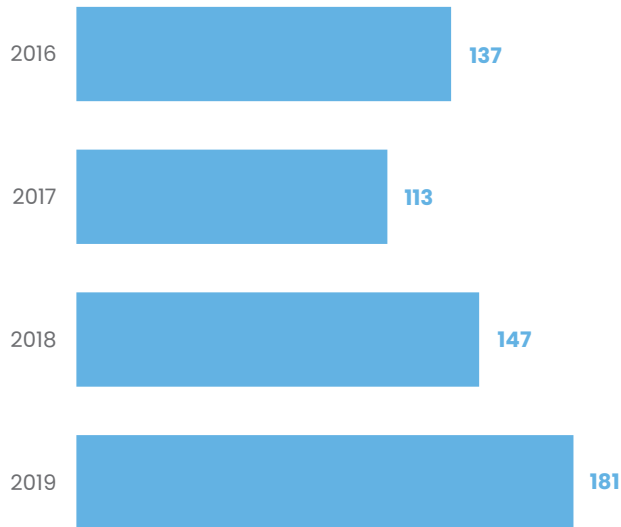




## Bioscience Patents in Nebraska

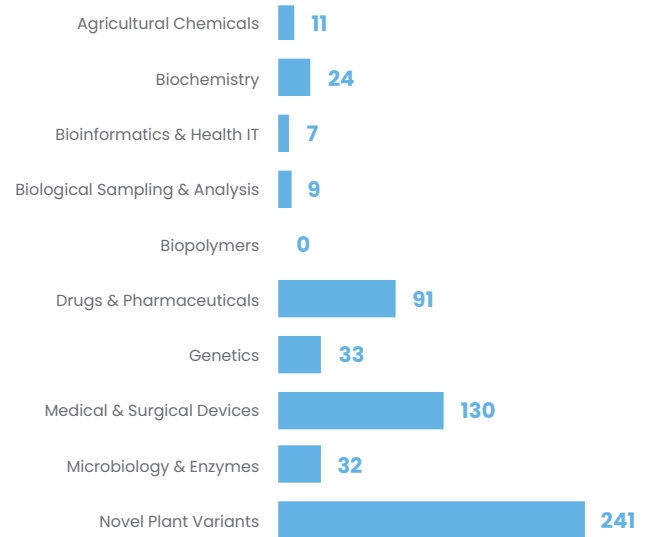
### Bioscience-Related U.S. Patents

2016-2019



### Bioscience-Related U.S. Patents by Segment

2016-2019



## Source Notes

Employment, Establishments and Wages: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), enhanced file from IMPLAN Group, LLC.

Employment Multipliers: state-level Input/Output models from IMPLAN Group, LLC.

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.

