



South Carolina's bioscience industry employed 13,967 in 2016 across more than 1,500 state business establishments. The state's bioscience employment base has increased by 4.3 percent since 2014, matching the national growth rate. Job gains were contributed by two industry subsectors—bioscience-related distribution and drugs and pharmaceuticals. South Carolina firms have increased their base of bioscience establishments by 14 percent over the same 2-year period. NIH awards to South Carolina institutions have risen from \$147 million in 2014 to nearly \$184 million in 2017. State universities spent \$439 million on R&D activities in bioscience fields which comprises 73 percent of all academic R&D in science and engineering fields. The concentration of bioscience academic R&D expenditures is far higher than the national average and the majority of states.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	South Carolina	United States	Quintile
Bioscience Industry, 2016			
Bioscience Industry Employment	13,967	1,743,639	III
Bioscience Industry Location Quotient	0.59	n/a	IV
Bioscience Industry Establishments	1,520	85,702	II
Academic Bioscience R&D Expenditures, FY 2016			
Bioscience R&D (\$ thousands)	\$439,149	\$41,972,205	III
Bioscience Share of Total R&D	73%	62%	I
Bioscience R&D Per Capita	\$89	\$130	IV
NIH Funding, FY 2017			
Funding (\$ thousands)	\$183,487	\$26,150,485	III
Funding Per Capita	\$37	\$80	IV
Bioscience Venture Capital Investments, 2014-17 (\$ millions)			
	\$77.30	\$66,168.62	III
Bioscience and Related Patents, 2014-17			
	565	102,862	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	South Carolina		United States	
	2016	2014-2016 Change	2016	2014-2016 Change
Agricultural Feedstock and Industrial Biosciences				
Establishments	30	25.0%	1,709	-3.2%
Employment	291	-19.1%	68,027	-1.2%
Location Quotient	0.31		n/a	
Direct-Effect Employment Multiplier	4.82			
Total Employment Impact	1,403			
Average Annual Wage	\$54,575	8.6%	\$80,961	2.7%
Bioscience-Related Distribution				
Establishments	594	7.6%	39,149	3.8%
Employment	4,472	15.4%	469,640	3.7%
Location Quotient	0.70		n/a	
Direct-Effect Employment Multiplier	2.13			
Total Employment Impact	9,532			
Average Annual Wage	\$77,207	5.7%	\$93,677	2.7%
Drugs and Pharmaceuticals				
Establishments	85	30.8%	3,754	13.7%
Employment	2,514	11.0%	299,113	2.0%
Location Quotient	0.62		n/a	
Direct-Effect Employment Multiplier	4.85			
Total Employment Impact	12,188			
Average Annual Wage	\$64,435	-4.9%	\$113,815	-3.2%
Medical Devices and Equipment				
Establishments	144	18.0%	8,083	5.9%
Employment	3,626	-4.6%	359,293	2.9%
Location Quotient	0.74		n/a	
Direct-Effect Employment Multiplier	2.51			
Total Employment Impact	9,100			
Average Annual Wage	\$62,469	10.1%	\$84,746	6.5%
Research, Testing and Medical Laboratories				
Establishments	667	17.4%	33,007	13.1%
Employment	3,064	-1.0%	547,566	8.2%
Location Quotient	0.41		n/a	
Direct-Effect Employment Multiplier	2.04			
Total Employment Impact	6,236			
Average Annual Wage	\$71,903	6.7%	\$106,942	5.5%
Total Bioscience Industry				
Establishments	1,520	14.2%	85,702	7.7%
Employment	13,967	4.3%	1,743,639	4.4%
Location Quotient	0.59		n/a	
Direct-Effect Employment Multiplier	2.75			
Total Employment Impact	38,458			
Average Annual Wage	\$69,447	5.9%	\$98,961	3.1%
Total Private Sector				
Establishments	120,936	6.3%	9,243,034	3.4%
Employment	1,650,590	6.0%	120,884,570	4.2%
Average Annual Wage	\$42,223	5.1%	\$53,354	4.3%

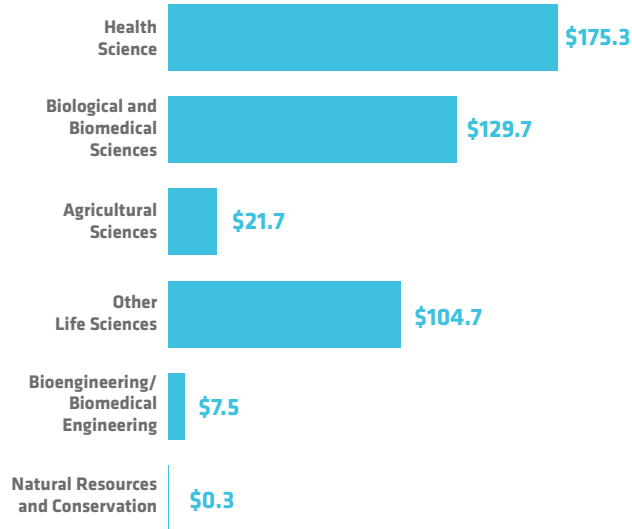
Note: U.S. employment metrics include Puerto Rico.

Bioscience Research in South Carolina

Bioscience Academic R&D Expenditures

\$ Millions

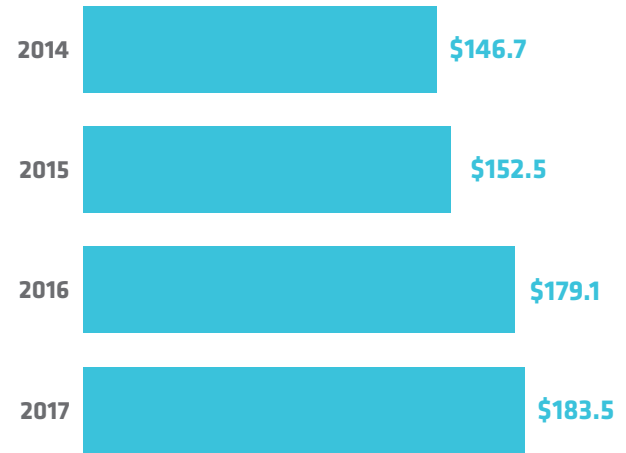
FY 2016



NIH Awards

\$ Millions

FY 2014-2017

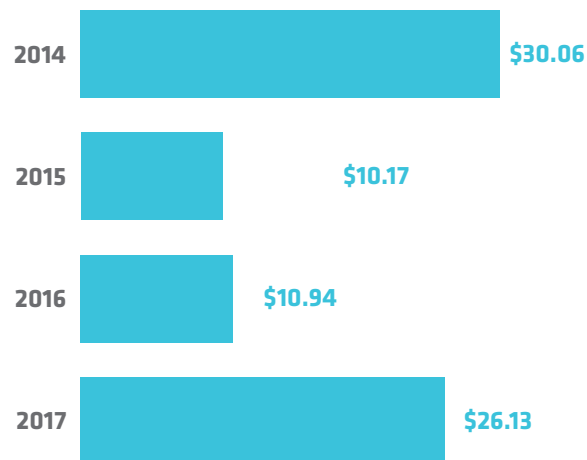


Bioscience Venture Capital in South Carolina

Bioscience-Related Venture Capital Investments

\$ Millions

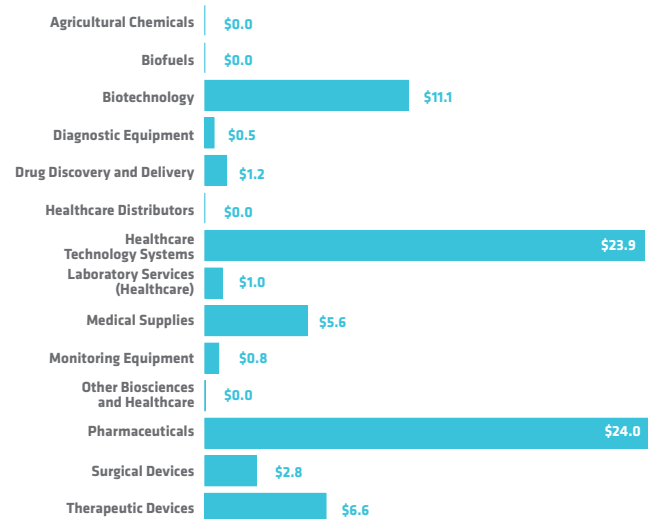
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Bioscience-Related Venture Capital Investments by Segment

\$ Millions

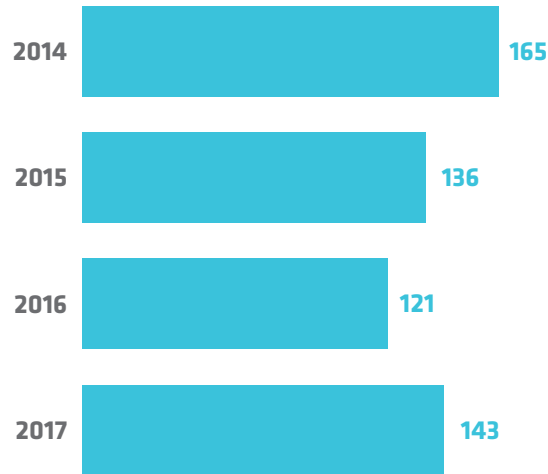
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Bioscience Patents in South Carolina

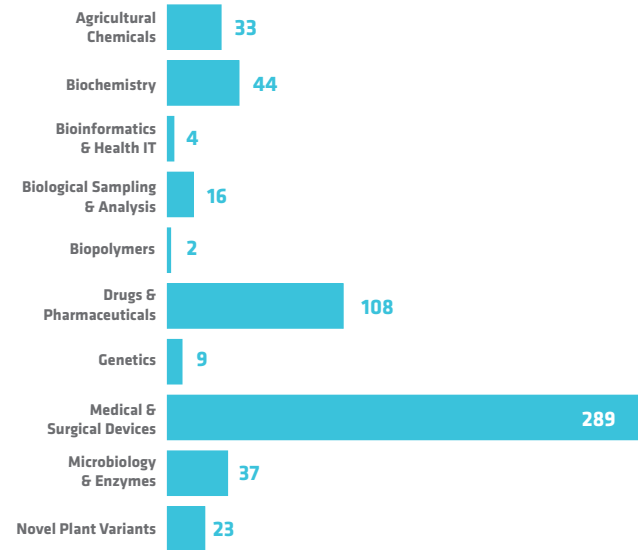
Bioscience-Related U.S. Patents

2014-2017



Bioscience-Related U.S. Patents by Segment

2014-2017



Source Notes

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

Employment Multipliers: IMPLAN state-level Input/Output models.

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.