



TEconomy/BIO

The Value of Bioscience Innovation in Growing Jobs and Improving Quality of Life 2016

## South Carolina

South Carolina's bioscience industry is growing, and in 2014 its companies employed nearly 14,000 across 1,298 business establishments. The state's largest component subsectors include medical devices and equipment; bioscience-related distribution; and research, testing, and medical labs. Since 2012, South Carolina bioscience employment has increased by 2.1 percent with three of its five industry subsectors adding jobs. The state's research universities are especially focused in the biosciences relative to other research fields with their nearly \$407 million in bioscience academic R&D in 2014 accounting for 71 percent of all academic research compared with 61 percent for the nation. Research funding from NIH to South Carolina institutions has increased in recent years, and by 2015 exceeded \$152 million.

### Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	South Carolina	United States	Quintile
<b>Bioscience Industry, 2014</b>			
Bioscience Industry Employment	13,890	1,655,680	III
Bioscience Industry Location Quotient	0.63	n/a	IV
Bioscience Industry Establishments	1,298	77,283	II
<b>Academic Bioscience R&amp;D Expenditures, FY 2014</b>			
Bioscience R&D (\$ thousands)	\$406,674	\$38,873,926	III
Bioscience Share of Total R&D	71%	61%	I
Bioscience R&D Per Capita	\$84	\$122	IV
<b>NIH Funding, FY 2015</b>			
Funding (\$ thousands)	\$152,456	\$22,869,746	III
Funding Per Capita	\$31	\$71	IV
<b>Bioscience Venture Capital Investments, 2012–15 (\$ millions)</b>	\$15.1	\$48,742.10	IV
<b>Bioscience and Related Patents, 2012–15</b>	657	101,026	III

State ranking figures for bioscience performance metrics are calculated as quintiles, where:

top quintile – I II III IV V – bottom quintile

For source notes, see end of State Profile.



**South Carolina**

Industry Subsector	South Carolina		United States	
	2014	2012–2014 Change	2014	2012–2014 Change
<b>Agricultural Feedstock and Chemicals</b>				
Establishments	25	-13.8%	1,811	2.2%
Employment	609	8.1%	77,545	1.5%
Location Quotient	0.59		n/a	
Direct-Effect Employment Multiplier	15.8		18.4	
Total Employment Impact	9,605		1,432,125	
Average Annual Wage	\$58,445	-0.3%	\$80,640	6.3%
<b>Bioscience-Related Distribution</b>				
Establishments	557	7.1%	37,833	2.8%
Employment	3,920	9.4%	452,325	2.3%
Location Quotient	0.65		n/a	
Direct-Effect Employment Multiplier	2.9		3.0	
Total Employment Impact	11,358		1,358,820	
Average Annual Wage	\$72,960	5.5%	\$90,458	6.2%
<b>Drugs and Pharmaceuticals</b>				
Establishments	65	35.4%	3,301	8.0%
Employment	2,265	9.2%	293,353	3.2%
Location Quotient	0.58		n/a	
Direct-Effect Employment Multiplier	10.3		11.0	
Total Employment Impact	23,384		3,242,627	
Average Annual Wage	\$67,777	9.1%	\$117,524	10.3%
<b>Medical Devices and Equipment</b>				
Establishments	122	29.8%	7,636	5.5%
Employment	3,800	-7.0%	349,045	-0.1%
Location Quotient	0.81		n/a	
Direct-Effect Employment Multiplier	4.2		4.6	
Total Employment Impact	16,005		1,596,802	
Average Annual Wage	\$56,761	14.0%	\$79,537	5.1%
<b>Research, Testing, and Medical Laboratories</b>				
Establishments	528	14.5%	26,702	10.2%
Employment	3,297	0.0%	483,412	3.4%
Location Quotient	0.51		n/a	
Direct-Effect Employment Multiplier	2.9		3.1	
Total Employment Impact	9,482		1,554,719	
Average Annual Wage	\$67,220	5.3%	\$97,485	6.8%
<b>Total Bioscience Industry</b>				
Establishments	1,298	12.6%	77,283	5.7%
Employment	13,890	2.1%	1,655,680	2.2%
Location Quotient	0.63		n/a	
Direct-Effect Employment Multiplier	5.0		5.5	
Total Employment Impact	70,021		9,185,094	
Average Annual Wage	\$65,685	8.5%	\$94,543	7.2%
<b>Total Private Sector</b>				
Establishments	113,781	4.9%	8,937,672	2.7%
Employment	1,556,748	5.3%	116,018,300	4.4%
Average Annual Wage	\$40,165	3.9%	\$51,148	4.3%

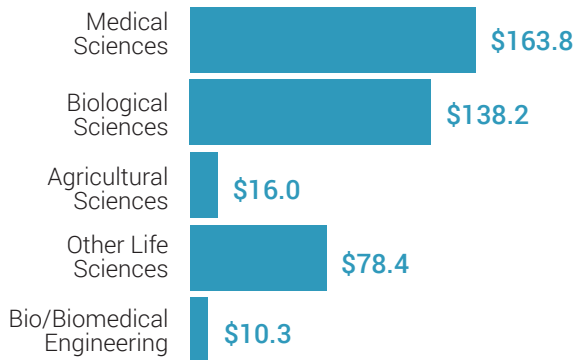
Note: U.S. employment metrics include Puerto Rico.



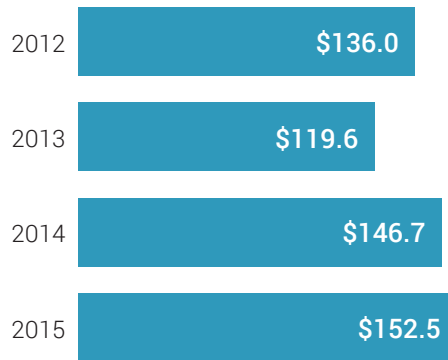
### South Carolina

#### Bioscience Research in South Carolina

Bioscience Academic R&D Expenditures  
\$ Millions  
FY 2014

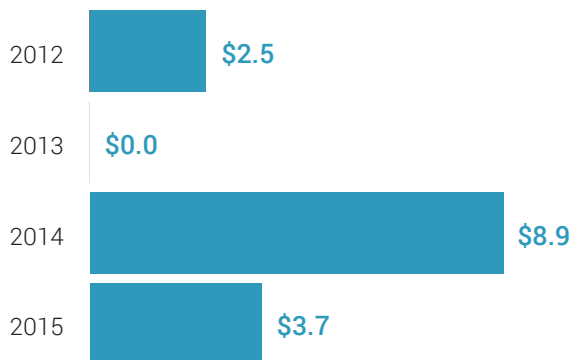


NIH Awards  
\$ Millions  
FY 2012-2015

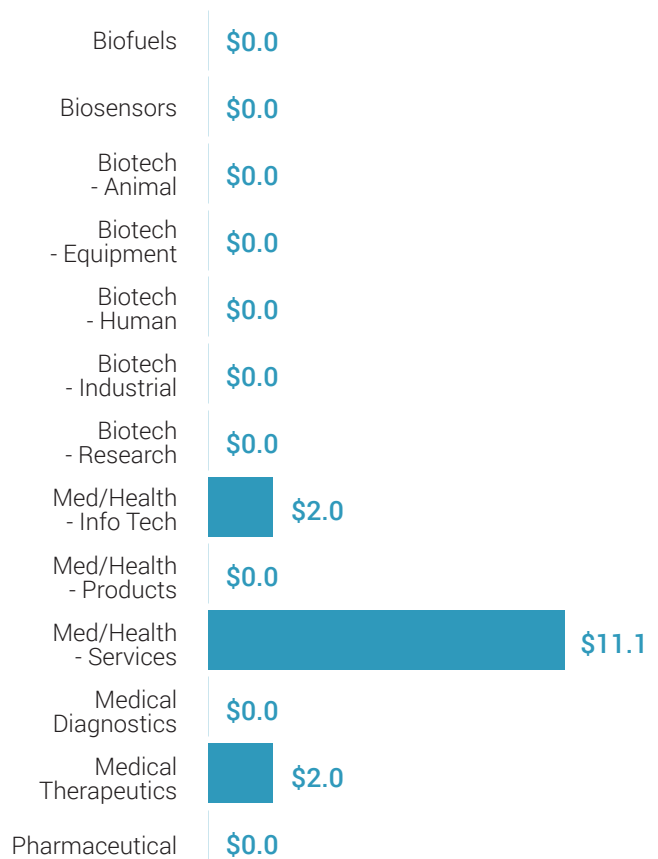


#### Bioscience Venture Capital in South Carolina

Bioscience-Related Venture  
Capital Investments  
\$ Millions  
2012-2015



Bioscience-Related Venture  
Capital Investments by Segment  
\$ Millions  
2012-2015

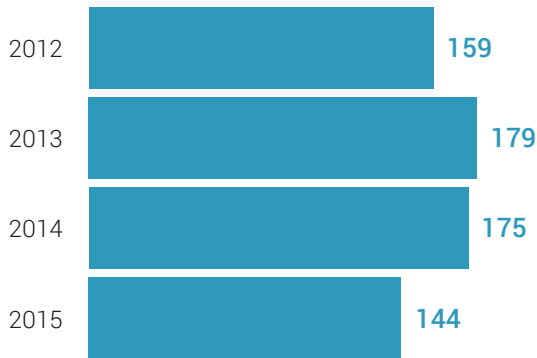




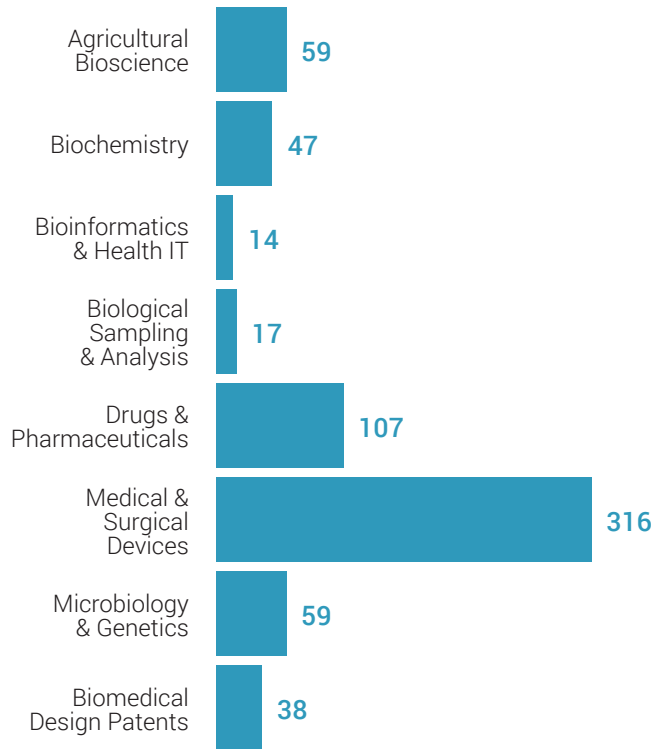
South Carolina

Bioscience Patents in South Carolina

Bioscience-Related U.S. Patents 2012-2015



Bioscience-Related U.S. Patents by Segment 2012-2015



Source Notes

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

**Employment Multipliers:** IMPLAN Group, LLC 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:** Thomson Reuters Thomson ONE venture capital database.

**Patents:** U.S. Patent & Trademark Office data from Thomson Reuters Thomson Innovation patent analysis database.

For a more detailed discussion of the data and methodology used, please see the Appendix to the full national report.

