TEConomy/BIO

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

Louisiana

Louisiana's bioscience industry is growing, and by 2014 reached nearly 11,000 jobs that span 1,046 business establishments. Employment has grown by 4.6 percent since 2012 with job gains contributed by four of the five major industry subsectors. Louisiana has a highly specialized employment concentration in agricultural feedstock and chemicals where the state has one and a half times the average concentration for the nation. Louisiana's research universities are especially focused in the biosciences relative to other fields with their nearly $415 million in bioscience academic R&D in 2014 accounting for 66 percent of all academic research compared with 61 percent for the nation. The state's 413 patents issued in the biosciences since 2012 are spread across a diverse set of technology areas including medical and surgical devices, drugs and pharmaceuticals, the agricultural biosciences, and biochemistry.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Louisiana	United States	Quintile
Bioscience Industry, 2014			
Bioscience Industry Employment	10,804	1,655,680	IV
Bioscience Industry Location Quotient	0.47	n/a	V
Bioscience Industry Establishments	1,046	77,283	III
Academic Bioscience R&D Expenditures, FY 2014			
Bioscience R&D ($ thousands)	$414,673	$38,873,926	III
Bioscience Share of Total R&D	66%	61%	II
Bioscience R&D Per Capita	$89	$122	III
NIH Funding, FY 2015			
Funding ($ thousands)	$129,542	$22,869,746	III
Funding Per Capita	$28	$71	IV
Bioscience Venture Capital Investments, 2012–15 ($ millions)	$10.5	$48,742.10	IV
Bioscience and Related Patents, 2012–15	413	101,026	IV

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.

Louisiana

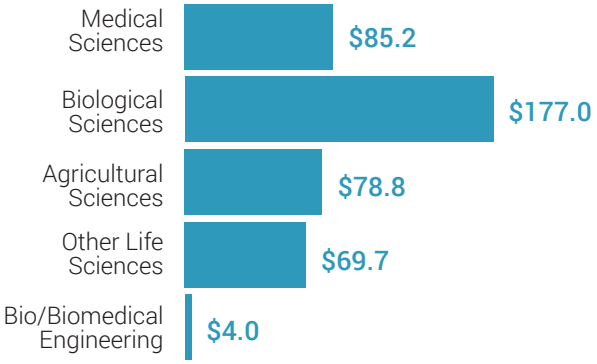
Industry Subsector	Louisiana		United States	
	2014	2012–2014 Change	2014	2012–2014 Change
Agricultural Feedstock and Chemicals				
Establishments	41	2.5%	1,811	2.2%
Employment	2,775	4.5%	77,545	1.5%
Location Quotient	2.58		n/a	
Direct-Effect Employment Multiplier	16.9		18.4	
Total Employment Impact	46,901		1,432,125	
Average Annual Wage	$105,582	4.6%	$80,640	6.3%
Bioscience-Related Distribution				
Establishments	609	3.8%	37,833	2.8%
Employment	5,062	0.7%	452,325	2.3%
Location Quotient	0.81		n/a	
Direct-Effect Employment Multiplier	2.8		3.0	
Total Employment Impact	14,278		1,358,820	
Average Annual Wage	$88,406	10.6%	$90,458	6.2%
Drugs and Pharmaceuticals				
Establishments	28	-9.7%	3,301	8.0%
Employment	528	-0.8%	293,353	3.2%
Location Quotient	0.13		n/a	
Direct-Effect Employment Multiplier	10.9		11.0	
Total Employment Impact	5,730		3,242,627	
Average Annual Wage	$60,253	11.3%	$117,524	10.3%
Medical Devices and Equipment				
Establishments	66	4.8%	7,636	5.5%
Employment	230	7.1%	349,045	-0.1%
Location Quotient	0.05		n/a	
Direct-Effect Employment Multiplier	4.1		4.6	
Total Employment Impact	951		1,596,802	
Average Annual Wage	$67,207	5.5%	$79,537	5.1%
Research, Testing, and Medical Laboratories				
Establishments	302	21.0%	26,702	10.2%
Employment	2,209	16.1%	483,412	3.4%
Location Quotient	0.33		n/a	
Direct-Effect Employment Multiplier	2.6		3.1	
Total Employment Impact	5,726		1,554,719	
Average Annual Wage	$47,079	3.4%	$97,485	6.8%
Total Bioscience Industry				
Establishments	1,046	7.8%	77,283	5.7%
Employment	10,804	4.6%	1,655,680	2.2%
Location Quotient	0.47		n/a	
Direct-Effect Employment Multiplier	5.5		5.5	
Total Employment Impact	58,929		9,185,094	
Average Annual Wage	$82,542	6.7%	$94,543	7.2%
Total Private Sector				
Establishments	118,969	-1.2%	8,937,672	2.7%
Employment	1,609,288	4.6%	116,018,300	4.4%
Average Annual Wage	$45,800	5.3%	$51,148	4.3%

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

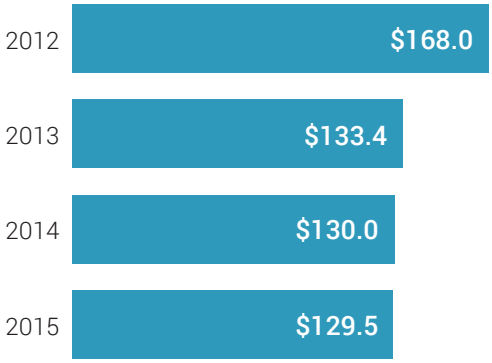
Louisiana

Bioscience Research in Louisiana

Bioscience Academic R&D Expenditures
$ Millions
FY 2014

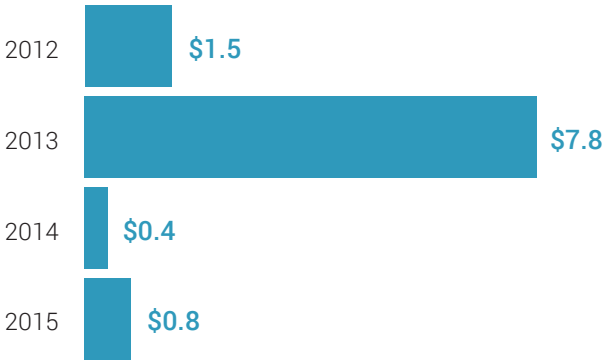


NIH Awards
$ Millions
FY 2012-2015

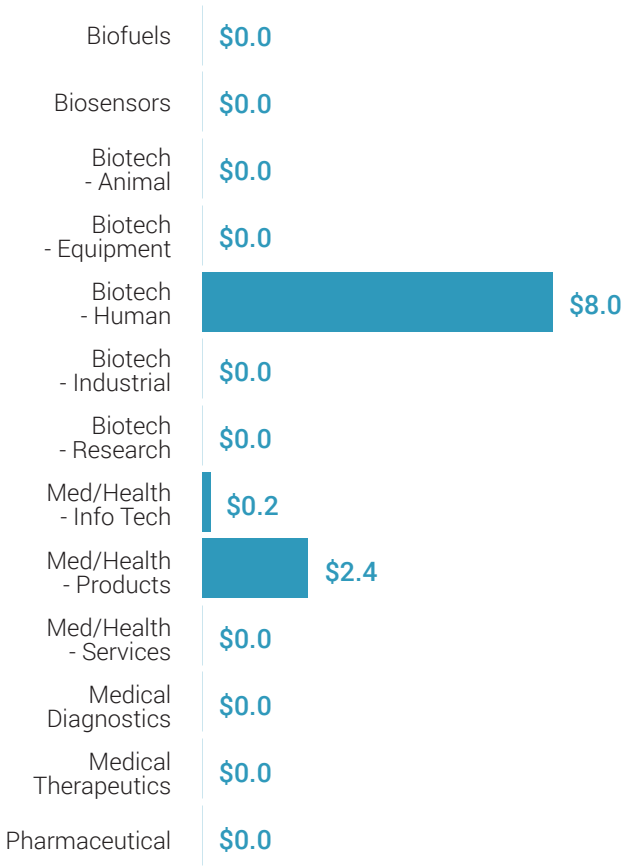


Bioscience Venture Capital in Louisiana

Bioscience-Related Venture Capital Investments
$ Millions
2012-2015



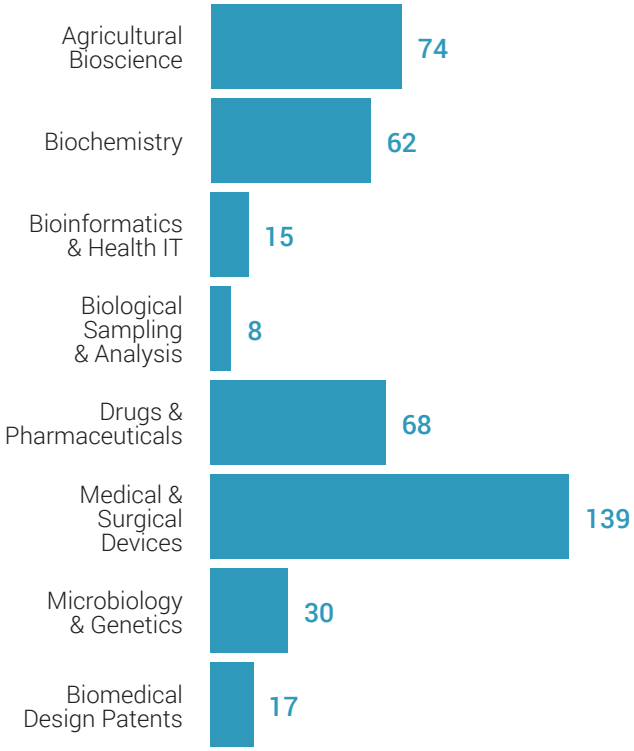
Bioscience-Related Venture Capital Investments by Segment
$ Millions
2012-2015



Bioscience Patents in Louisiana

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.

TECONOMY PARTNERS LLC
Innovating Tomorrow's Economic Landscape

Bio Biotechnology Innovation Organization