

Rhode Island



Rhode Island’s bioscience industry employed just over 4,500 in 2012 in 273 business establishments across the state. The state has a specialized employment concentration in drugs and pharmaceuticals with a location quotient of 1.39 meaning Rhode Island has a 39 percent greater concentration of subsector jobs in its economy relative to the national average. State bioscience firms have shed jobs in most subsectors but the research, testing, and medical labs subsector is modest in size but emerging with nearly 18 percent job growth since 2007. On a per capita basis, Rhode Island is especially concentrated in academic bioscience R&D and in NIH funding.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Rhode Island	United States	Quintile
Bioscience Industry, 2012			
Bioscience Industry Employment	4,504	1,619,746	V
Bioscience Industry Location Quotient	0.79	n/a	III
Bioscience Industry Establishments	273	73,088	V
Academic Bioscience R&D Expenditures, FY 2012			
Bioscience R&D (\$ thousands)	\$148,990	\$38,139,876	IV
Bioscience Share of Total R&D	44%	61%	V
Bioscience R&D Per Capita	\$142	\$119	II
NIH Funding, FY 2013			
Funding (\$ thousands)	\$144,463	\$22,293,255	III
Funding Per Capita	\$137	\$70	I
Bioscience Venture Capital Investments, 2009–13 (\$ millions)	\$193.1	\$49,401.7	III
Bioscience and Related Patents, 2009–13	501	100,238	IV

State ranking figures for bioscience performance metrics are calculated as quintiles, where I = top quintile, III = middle quintile, and V = bottom quintile.

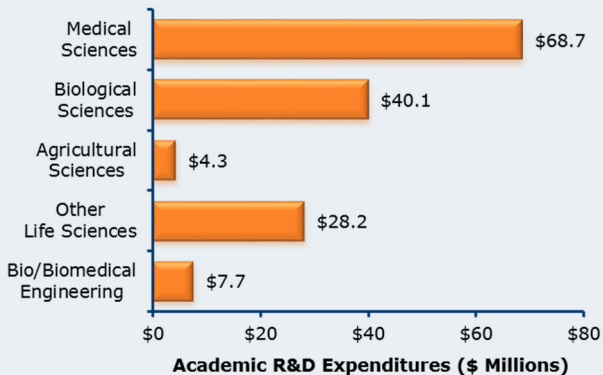
For source notes, see end of State Profile.

Industry Subsector	Rhode Island		United States	
	2012	2007-2012 Change	2012	2007-2012 Change
Agricultural Feedstock & Chemicals				
Establishments	0	n/a	1,772	5.2%
Employment	0	n/a	76,404	-1.0%
Location Quotient	0.00		n/a	
Direct-Effect Employment Multiplier	n/a		18.1	
Total Employment Impact	n/a		1,382,637	
Average Annual Wage	\$0	n/a	\$75,828	14.2%
Bioscience-Related Distribution				
Establishments	125	-16.4%	36,793	1.4%
Employment	1,142	-1.2%	442,016	-3.9%
Location Quotient	0.74		n/a	
Direct-Effect Employment Multiplier	2.6		2.7	
Total Employment Impact	2,960		1,199,015	
Average Annual Wage	\$77,064	9.1%	\$85,188	11.5%
Drugs and Pharmaceuticals				
Establishments	12	-29.4%	3,057	12.0%
Employment	1,391	-27.8%	284,331	-10.9%
Location Quotient	1.39		n/a	
Direct-Effect Employment Multiplier	8.3		9.9	
Total Employment Impact	11,492		2,673,265	
Average Annual Wage	\$103,996	13.4%	\$106,576	13.9%
Medical Devices and Equipment				
Establishments	36	2.9%	7,235	12.0%
Employment	1,122	-24.8%	349,432	1.4%
Location Quotient	0.91		n/a	
Direct-Effect Employment Multiplier	3.2		3.9	
Total Employment Impact	3,604		1,318,459	
Average Annual Wage	\$58,845	1.8%	\$75,695	10.7%
Research, Testing, and Medical Laboratories				
Establishments	100	30.4%	24,231	31.0%
Employment	846	17.5%	467,563	9.7%
Location Quotient	0.51		n/a	
Direct-Effect Employment Multiplier	2.3		2.7	
Total Employment Impact	1,945		1,284,196	
Average Annual Wage	\$60,409	10.6%	\$91,248	15.9%
Total Bioscience Industry				
Establishments	273	-2.4%	73,088	11.4%
Employment	4,504	-15.2%	1,619,746	-0.4%
Location Quotient	0.79		n/a	
Direct-Effect Employment Multiplier	4.6		4.9	
Total Employment Impact	20,717		7,857,572	
Average Annual Wage	\$77,674	7.2%	\$88,202	12.8%
Total Private Sector				
Establishments	34,577	-2.4%	8,699,564	-0.5%
Employment	391,998	-6.2%	111,137,206	-3.1%
Average Annual Wage	\$44,749	12.4%	\$49,130	11.1%

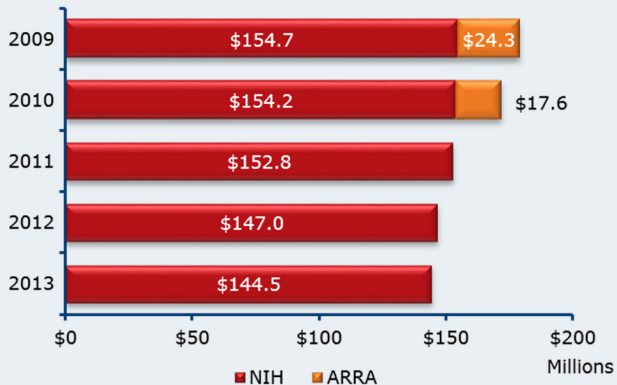
Note: U.S. employment metrics include Puerto Rico. Estimates of total impacts do not include Puerto Rico.

Bioscience Research in Rhode Island

Bioscience Academic R&D Expenditures, FY 2012



NIH Awards, 2009–2013

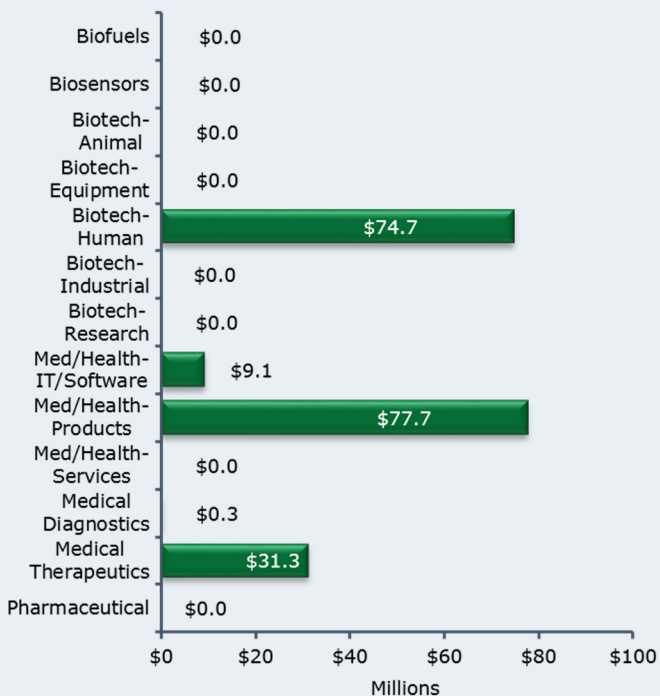


Bioscience Venture Capital in Rhode Island

Bioscience-Related Venture Capital Investments, 2009–2013

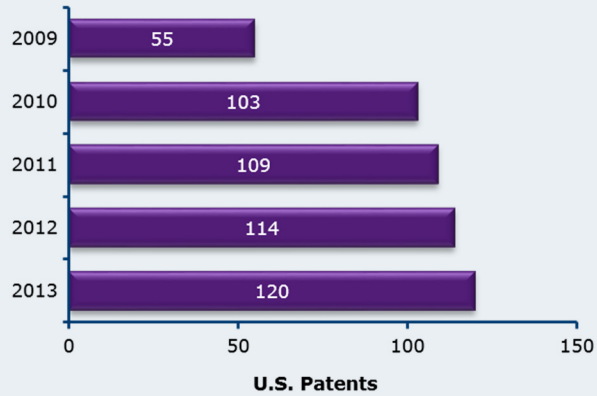


Bioscience-Related Venture Capital Investments by Segment, 2009–2013

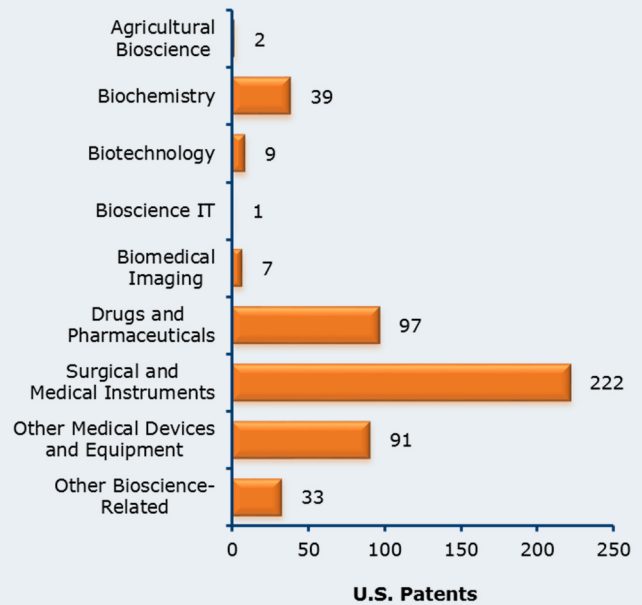


Bioscience Patents in Rhode Island

Bioscience-Related Patents, 2009–2013



Bioscience-Related Patents by Segment, 2009–2013



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), and NIH-managed funding for FY 2009 and FY 2010 from the American Recovery and Reinvestment Act (ARRA) website.

Venture Capital: Thomson Reuters Thomson ONE venture capital database.

Patents: U.S. Patent & Trademark Office data from Thomson Reuters Delphion Patent Analysis Database.

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