

Puerto Rico



Puerto Rico has a sizable, highly specialized, and diverse bioscience industry. Its bioscience companies employed more than 38,000 in 2012 across 1,001 business establishments. Puerto Rico has a specialized employment concentration in the biosciences with a very high location quotient of 3.85 meaning the industry is 285 percent more concentrated in the territory relative to the U.S. average. Puerto Rico has an impressive distinction it shares only with New Jersey in its specialization in four of the five major industry subsectors—drugs and pharmaceuticals; medical devices; bioscience-related distribution; and research, testing, and medical labs. Average annual wages for Puerto Rico’s bioscience workers were nearly \$52,000 in 2012, 28 percent greater than the average for the overall private sector.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Puerto Rico	United States	Quintile
Bioscience Industry, 2012			
Bioscience Industry Employment	38,353	1,619,746	II
Bioscience Industry Location Quotient	3.85	n/a	I
Bioscience Industry Establishments	1,001	73,088	III
Academic Bioscience R&D Expenditures, FY 2012			
Bioscience R&D (\$ thousands)	\$81,816	\$38,139,876	V
Bioscience Share of Total R&D	58%	61%	III
Bioscience R&D Per Capita	\$23	\$119	V
NIH Funding, FY 2013			
Funding (\$ thousands)	\$52,001	\$22,293,255	IV
Funding Per Capita	\$14	\$70	V
Bioscience Venture Capital Investments, 2009–13 (\$ millions)	\$0.0	\$49,401.7	n/a
Bioscience and Related Patents, 2009–13	49	100,238	V

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

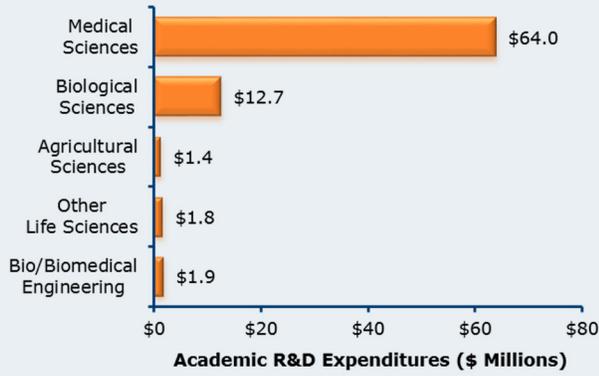
For source notes, see end of State Profile.

Industry Subsector	Puerto Rico		United States	
	2012	2007–2012 Change	2012	2007–2012 Change
Agricultural Feedstock & Chemicals				
Establishments	7	n/a	1,772	5.2%
Employment	354	n/a	76,404	-1.0%
Location Quotient	0.75		n/a	
Direct-Effect Employment Multiplier	n/a		18.1	
Total Employment Impact	n/a		1,382,637	
Average Annual Wage	\$64,416	n/a	\$75,828	14.2%
Bioscience-Related Distribution				
Establishments	262	-23.4%	36,793	1.4%
Employment	6,247	11.5%	442,016	-3.9%
Location Quotient	2.22		n/a	
Direct-Effect Employment Multiplier	n/a		2.7	
Total Employment Impact	n/a		1,199,015	
Average Annual Wage	\$62,933	18.6%	\$85,188	11.5%
Drugs and Pharmaceuticals				
Establishments	50	-48.5%	3,057	12.0%
Employment	14,515	-40.9%	284,331	-10.9%
Location Quotient	8.31		n/a	
Direct-Effect Employment Multiplier	n/a		9.9	
Total Employment Impact	n/a		2,673,265	
Average Annual Wage	\$66,911	13.8%	\$106,576	13.9%
Medical Devices and Equipment				
Establishments	57	-24.0%	7,235	12.0%
Employment	12,379	-11.7%	349,432	1.4%
Location Quotient	5.77		n/a	
Direct-Effect Employment Multiplier	n/a		3.9	
Total Employment Impact	n/a		1,318,459	
Average Annual Wage	\$37,773	15.6%	\$75,695	10.7%
Research, Testing, and Medical Laboratories				
Establishments	625	3.6%	24,231	31.0%
Employment	4,858	16.7%	467,563	9.7%
Location Quotient	1.69		n/a	
Direct-Effect Employment Multiplier	n/a		2.7	
Total Employment Impact	n/a		1,284,196	
Average Annual Wage	\$25,906	19.2%	\$91,248	15.9%
Total Bioscience Industry				
Establishments	1,001	-11.2%	73,088	11.4%
Employment	38,353	-20.6%	1,619,746	-0.4%
Location Quotient	3.85		n/a	
Direct-Effect Employment Multiplier	n/a		4.9	
Total Employment Impact	n/a		7,857,572	
Average Annual Wage	\$51,641	9.0%	\$88,202	12.8%
Total Private Sector				
Establishments	48,510	-19.1%	8,699,564	-0.5%
Employment	682,921	-6.9%	111,137,206	-3.1%
Average Annual Wage	\$37,000	59.9%	\$49,130	11.1%

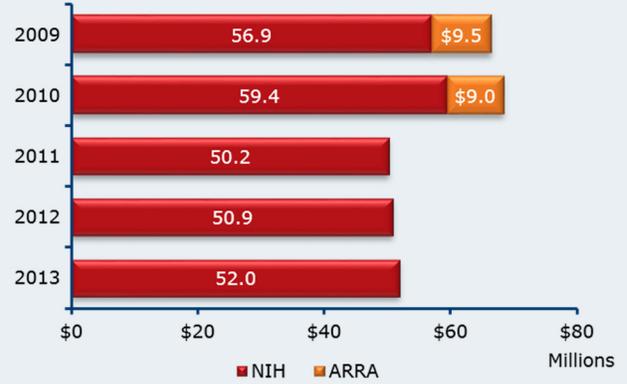
Note: U.S. employment metrics include Puerto Rico. Estimates of total impacts do not include Puerto Rico.

Bioscience Research in Puerto Rico

Bioscience Academic R&D Expenditures, FY 2012



NIH Awards, 2009–2013



Bioscience Venture Capital in Puerto Rico

Bioscience-Related Venture Capital Investments, 2009–2013

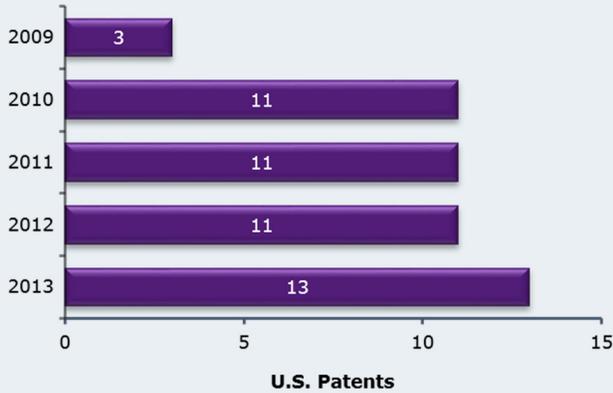
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Bioscience-Related Venture Capital Investments by Segment, 2009–2013

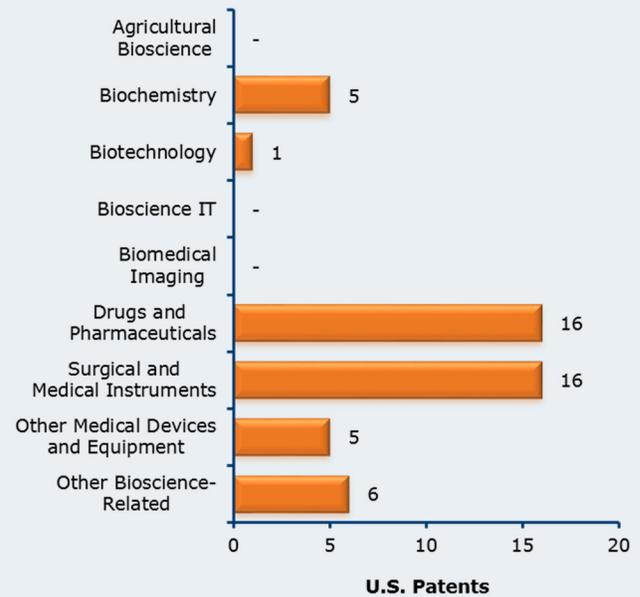
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Bioscience Patents in Puerto Rico

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.