

Indiana



Indiana’s bioscience industry is large, specialized, and stands out in its diversity. The state’s bioscience companies employed nearly 58,000 in 2012 across 1,908 individual business establishments. Indiana essentially has a specialized employment concentration in four of the five major subsectors, though the location quotient for bioscience-related distribution comes in just short of the 1.20 threshold. The state is highly specialized in three subsectors—agricultural feedstock and chemicals; medical devices; and drugs and pharmaceuticals. Among these the agricultural biosciences and medical devices have increased employment since 2007 in addition to research, testing, and medical labs, an emerging state subsector. Indiana’s research universities and colleges combine to conduct nearly \$578 million in bioscience-related R&D. In bioscience patents, Indiana’s 3,420 issued since 2009 highlight the diversity of the industry with medical devices, drugs and pharmaceuticals, biotechnology, and biochemistry all well represented. Venture capital investments in state bioscience companies totaled \$141 million since 2009 with funding focused in human biotechnology, medical therapeutics, and biomedical services.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Indiana	United States	Quintile
Bioscience Industry, 2012			
Bioscience Industry Employment	57,644	1,619,746	I
Bioscience Industry Location Quotient	1.64	n/a	I
Bioscience Industry Establishments	1,908	73,088	II
Academic Bioscience R&D Expenditures, FY 2012			
Bioscience R&D (\$ thousands)	\$577,901	\$38,139,876	II
Bioscience Share of Total R&D	50%	61%	IV
Bioscience R&D Per Capita	\$88	\$119	IV
NIH Funding, FY 2013			
Funding (\$ thousands)	\$185,446	\$22,293,255	III
Funding Per Capita	\$28	\$70	IV
Bioscience Venture Capital Investments, 2009–13 (\$ millions)	\$141.4	\$49,401.7	III
Bioscience and Related Patents, 2009–13	3,420	100,238	II

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

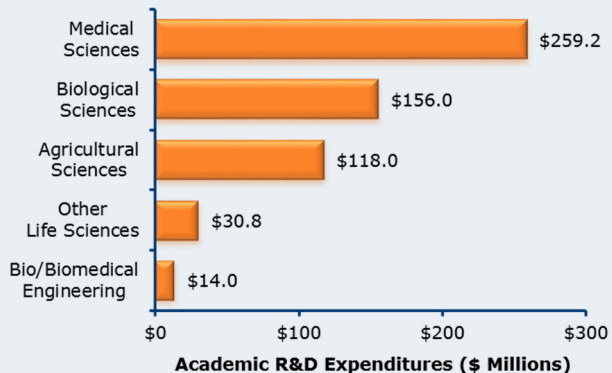
For source notes, see end of State Profile.

Industry Subsector	Indiana		United States	
	2012	2007-2012 Change	2012	2007-2012 Change
Agricultural Feedstock & Chemicals				
Establishments	46	35.3%	1,772	5.2%
Employment	4,892	11.8%	76,404	-1.0%
Location Quotient	2.94		n/a	
Direct-Effect Employment Multiplier	17.2		18.1	
Total Employment Impact	84,175		1,382,637	
Average Annual Wage	\$83,333	6.7%	\$75,828	14.2%
Bioscience-Related Distribution				
Establishments	1,289	-12.7%	36,793	1.4%
Employment	11,257	-3.3%	442,016	-3.9%
Location Quotient	1.19		n/a	
Direct-Effect Employment Multiplier	2.5		2.7	
Total Employment Impact	28,362		1,199,015	
Average Annual Wage	\$77,771	6.4%	\$85,188	11.5%
Drugs and Pharmaceuticals				
Establishments	44	0.0%	3,057	12.0%
Employment	14,671	-24.9%	284,331	-10.9%
Location Quotient	2.37		n/a	
Direct-Effect Employment Multiplier	9.1		9.9	
Total Employment Impact	132,952		2,673,265	
Average Annual Wage	\$135,079	33.9%	\$106,576	13.9%
Medical Devices and Equipment				
Establishments	155	27.0%	7,235	12.0%
Employment	18,847	7.3%	349,432	1.4%
Location Quotient	2.48		n/a	
Direct-Effect Employment Multiplier	3.3		3.9	
Total Employment Impact	61,868		1,318,459	
Average Annual Wage	\$69,068	7.4%	\$75,695	10.7%
Research, Testing, and Medical Laboratories				
Establishments	375	33.8%	24,231	31.0%
Employment	7,976	12.6%	467,563	9.7%
Location Quotient	0.78		n/a	
Direct-Effect Employment Multiplier	2.4		2.7	
Total Employment Impact	19,193		1,284,196	
Average Annual Wage	\$61,681	10.4%	\$91,248	15.9%
Total Bioscience Industry				
Establishments	1,908	-2.4%	73,088	11.4%
Employment	57,644	-4.2%	1,619,746	-0.4%
Location Quotient	1.64		n/a	
Direct-Effect Employment Multiplier	5.3		4.9	
Total Employment Impact	303,692		7,857,572	
Average Annual Wage	\$87,757	12.7%	\$88,202	12.8%
Total Private Sector				
Establishments	153,450	0.3%	8,699,564	-0.5%
Employment	2,418,241	-3.4%	111,137,206	-3.1%
Average Annual Wage	\$41,356	10.0%	\$49,130	11.1%

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

Bioscience Research in Indiana

Bioscience Academic R&D Expenditures, FY 2012



NIH Awards, 2009–2013

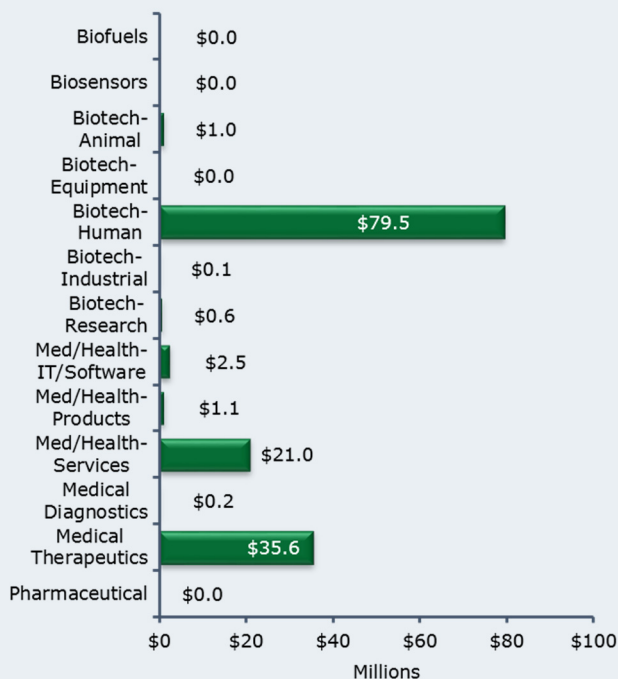


Bioscience Venture Capital in Indiana

Bioscience-Related Venture Capital Investments, 2009–2013

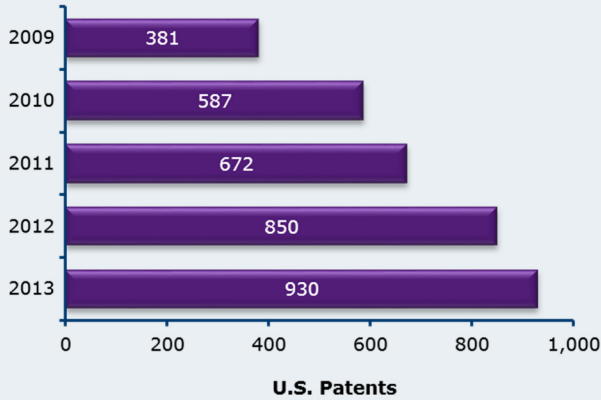


Bioscience-Related Venture Capital Investments by Segment, 2009–2013

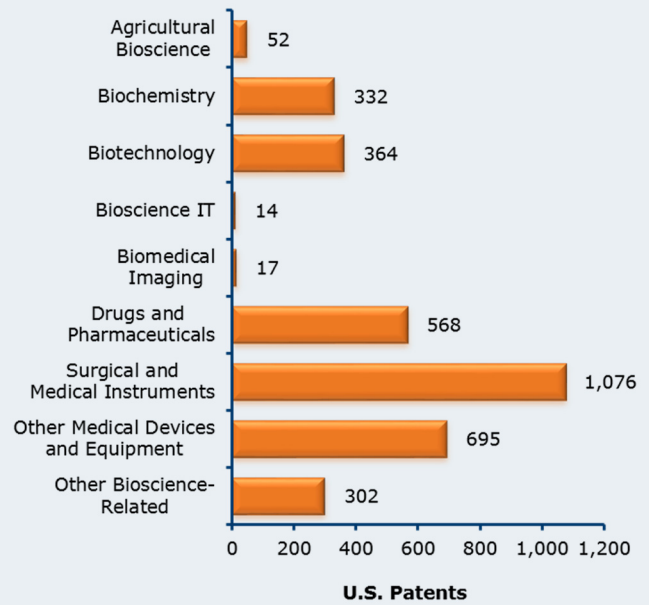


Bioscience Patents in Indiana

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.