

Texas



Texas has a large and growing bioscience industry with each of its subsectors contributing to job growth in recent years. The state's industry employment reached nearly 81,000 in 2012 across 4,607 business establishments. Texas' bioscience industry has grown its employment base by 6.8 percent since 2007, a period which includes the deep national recession and early stages of the recovery. Job growth among its five major subsectors was led by gains in bioscience-related distribution; research, testing, and medical labs; and agricultural feedstock and chemicals. Texas is among the top tier of states in the size of its bioscience and biomedical research base. The state's research universities combined to conduct \$2.85 billion in bioscience academic R&D in 2012. Funding from NIH to Texas institutions (both academic and non-academic) totaled nearly \$957 million in 2013. Texas also is among the national leaders in the levels of venture capital invested in its bioscience companies and in bioscience-related patenting since 2009.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Texas	United States	Quintile
Bioscience Industry, 2012			
Bioscience Industry Employment	80,792	1,619,746	I
Bioscience Industry Location Quotient	0.62	n/a	IV
Bioscience Industry Establishments	4,607	73,088	I
Academic Bioscience R&D Expenditures, FY 2012			
Bioscience R&D (\$ thousands)	\$2,850,132	\$38,139,876	I
Bioscience Share of Total R&D	65%	61%	II
Bioscience R&D Per Capita	\$108	\$119	III
NIH Funding, FY 2013			
Funding (\$ thousands)	\$956,595	\$22,293,255	I
Funding Per Capita	\$36	\$70	III
Bioscience Venture Capital Investments, 2009–13 (\$ millions)	\$2,933.6	\$49,401.7	I
Bioscience and Related Patents, 2009–13	4,031	100,238	I

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

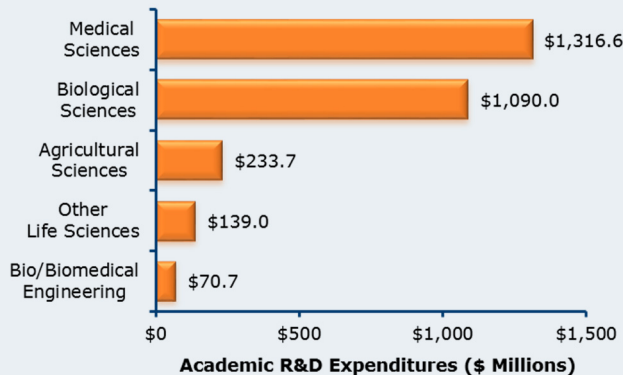
For source notes, see end of State Profile.

Industry Subsector	Texas		United States	
	2012	2007–2012 Change	2012	2007–2012 Change
Agricultural Feedstock & Chemicals				
Establishments	153	6.1%	1,772	5.2%
Employment	5,111	6.4%	76,404	-1.0%
Location Quotient	0.83		n/a	
Direct-Effect Employment Multiplier	17.8		18.1	
Total Employment Impact	91,040		1,382,637	
Average Annual Wage	\$95,303	27.2%	\$75,828	14.2%
Bioscience-Related Distribution				
Establishments	2,592	8.1%	36,793	1.4%
Employment	34,126	9.6%	442,016	-3.9%
Location Quotient	0.92		n/a	
Direct-Effect Employment Multiplier	2.9		2.7	
Total Employment Impact	98,852		1,199,015	
Average Annual Wage	\$84,139	9.0%	\$85,188	11.5%
Drugs and Pharmaceuticals				
Establishments	155	6.9%	3,057	12.0%
Employment	9,929	0.3%	284,331	-10.9%
Location Quotient	0.43		n/a	
Direct-Effect Employment Multiplier	9.7		9.9	
Total Employment Impact	96,141		2,673,265	
Average Annual Wage	\$105,589	11.2%	\$106,576	13.9%
Medical Devices and Equipment				
Establishments	388	14.8%	7,235	12.0%
Employment	10,431	1.7%	349,432	1.4%
Location Quotient	0.37		n/a	
Direct-Effect Employment Multiplier	3.9		3.9	
Total Employment Impact	40,861		1,318,459	
Average Annual Wage	\$69,016	14.5%	\$75,695	10.7%
Research, Testing, and Medical Laboratories				
Establishments	1,319	36.9%	24,231	31.0%
Employment	21,195	8.5%	467,563	9.7%
Location Quotient	0.56		n/a	
Direct-Effect Employment Multiplier	2.7		2.7	
Total Employment Impact	56,790		1,284,196	
Average Annual Wage	\$74,323	10.1%	\$91,248	15.9%
Total Bioscience Industry				
Establishments	4,607	15.5%	73,088	11.4%
Employment	80,792	6.8%	1,619,746	-0.4%
Location Quotient	0.62		n/a	
Direct-Effect Employment Multiplier	4.8		4.9	
Total Employment Impact	384,385		7,857,572	
Average Annual Wage	\$82,954	11.3%	\$88,202	12.8%
Total Private Sector				
Establishments	576,801	5.3%	8,699,564	-0.5%
Employment	8,959,401	5.0%	111,137,206	-3.1%
Average Annual Wage	\$51,598	13.4%	\$49,130	11.1%

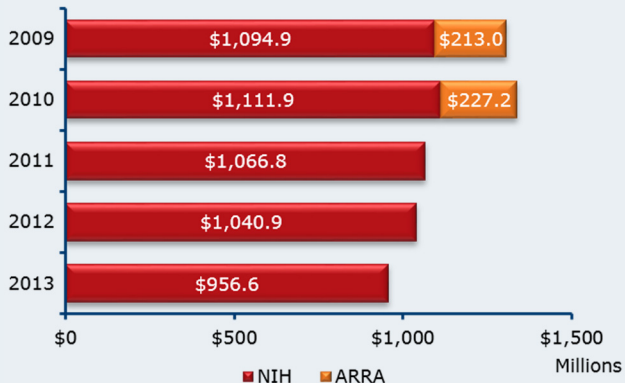
Note: U.S. employment metrics include Puerto Rico. Estimates of total impacts do not include Puerto Rico.

Bioscience Research in Texas

Bioscience Academic R&D Expenditures, FY 2012

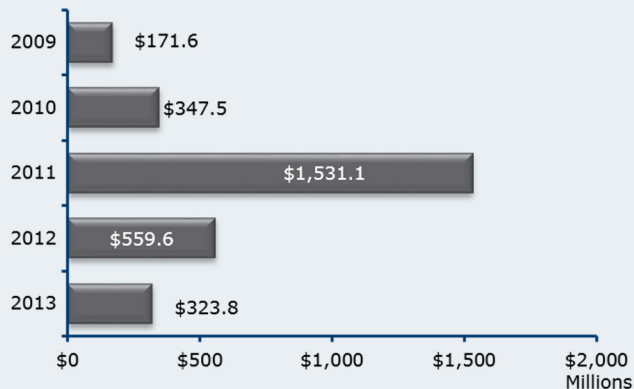


NIH Awards, 2009–2013

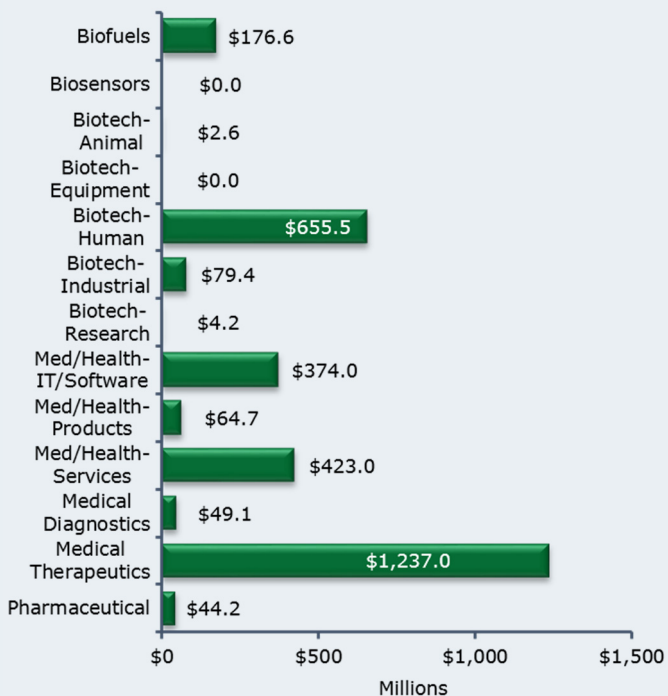


Bioscience Venture Capital in Texas

Bioscience-Related Venture Capital Investments, 2009–2013

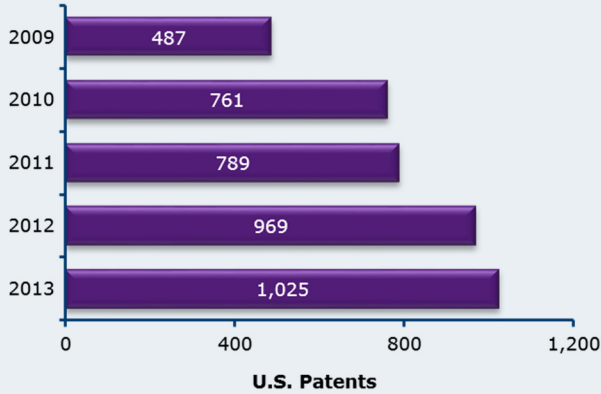


Bioscience-Related Venture Capital Investments by Segment, 2009–2013

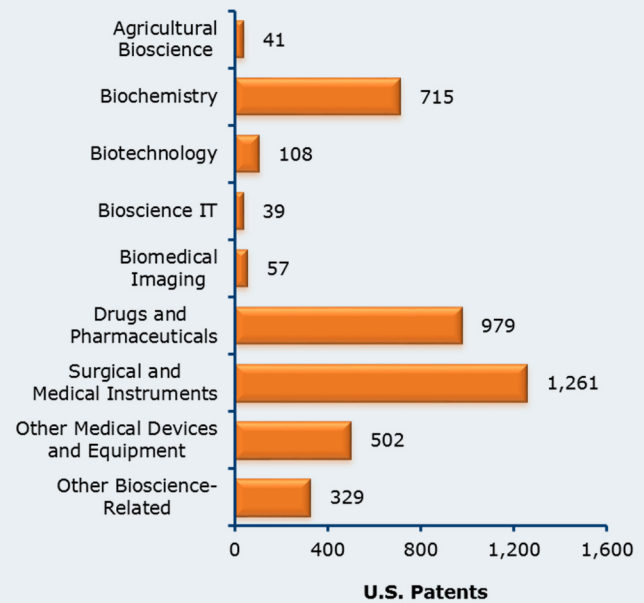


Bioscience Patents in Texas

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.