Connecticut

Connecticut has a nearly specialized employment concentration in the biosciences with two highly specialized subsectors—medical devices and equipment and drugs and pharmaceuticals. While the state's bioscience industry has shed jobs overall since 2007, its medical device subsector has increased employment by 3.8 percent since 2007. With $727 million in bioscience academic R&D expenditures, Connecticut's universities are advancing new discovery and technologies with a predominant focus in these life science fields—79 percent of all academic R&D in the state compared with a 61 percent national average. The state's bioscience research complex is highly concentrated with per capita academic R&D and NIH funding that stands among the top tier across all states.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Connecticut	United States	Quintile
Bioscience Industry, 2012			
Bioscience Industry Employment	24,194	1,619,746	III
Bioscience Industry Location Quotient	1.19	n/a	II
Bioscience Industry Establishments	864	73,088	III
Academic Bioscience R&D Expenditures, FY 2012			
Bioscience R&D ($ thousands)	$727,019	$38,139,876	II
Bioscience Share of Total R&D	79%	61%	I
Bioscience R&D Per Capita	$202	$119	I
NIH Funding, FY 2013			
Funding ($ thousands)	$444,605	$22,293,255	II
Funding Per Capita	$124	$70	I
Bioscience Venture Capital Investments, 2009–13 ($ millions)	$673.4	$49,401.7	II
Bioscience and Related Patents, 2009–13	2,991	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.

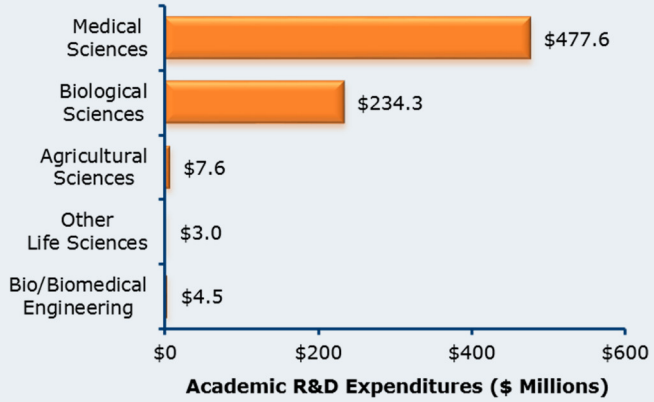
For source notes, see end of State Profile.

Industry Subsector	Connecticut		United States	
	2012	2007–2012 Change	2012	2007–2012 Change
Agricultural Feedstock & Chemicals				
Establishments	11	0.0%	1,772	5.2%
Employment	225	-14.4%	76,404	-1.0%
Location Quotient	0.24		n/a	
Direct-Effect Employment Multiplier	12.5		18.1	
Total Employment Impact	2,821		1,382,637	
Average Annual Wage	$62,300	-4.3%	$75,828	14.2%
Bioscience-Related Distribution				
Establishments	317	-3.7%	36,793	1.4%
Employment	4,280	-11.8%	442,016	-3.9%
Location Quotient	0.80		n/a	
Direct-Effect Employment Multiplier	2.6		2.7	
Total Employment Impact	11,101		1,199,015	
Average Annual Wage	$88,839	8.0%	$85,188	11.5%
Drugs and Pharmaceuticals				
Establishments	34	-2.9%	3,057	12.0%
Employment	6,169	-30.1%	284,331	-10.9%
Location Quotient	1.73		n/a	
Direct-Effect Employment Multiplier	8.8		9.9	
Total Employment Impact	54,324		2,673,265	
Average Annual Wage	$157,057	27.1%	$106,576	13.9%
Medical Devices and Equipment				
Establishments	135	-3.6%	7,235	12.0%
Employment	8,781	3.8%	349,432	1.4%
Location Quotient	2.01		n/a	
Direct-Effect Employment Multiplier	3.4		3.9	
Total Employment Impact	29,540		1,318,459	
Average Annual Wage	$73,606	24.7%	$75,695	10.7%
Research, Testing, and Medical Laboratories				
Establishments	367	13.2%	24,231	31.0%
Employment	4,739	-10.1%	467,563	9.7%
Location Quotient	0.81		n/a	
Direct-Effect Employment Multiplier	2.6		2.7	
Total Employment Impact	12,275		1,284,196	
Average Annual Wage	$103,789	6.6%	$91,248	15.9%
Total Bioscience Industry				
Establishments	864	2.9%	73,088	11.4%
Employment	24,194	-12.6%	1,619,746	-0.4%
Location Quotient	1.19		n/a	
Direct-Effect Employment Multiplier	4.7		4.9	
Total Employment Impact	113,069		7,857,572	
Average Annual Wage	$103,385	13.5%	$88,202	12.8%
Total Private Sector				
Establishments	107,565	-1.1%	8,699,564	-0.5%
Employment	1,391,273	-3.3%	111,137,206	-3.1%
Average Annual Wage	$63,470	7.3%	$49,130	11.1%

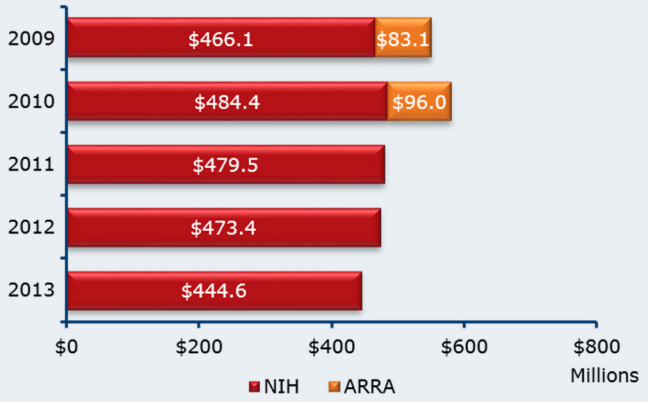
Note: U.S. employment metrics include Puerto Rico. Estimates of total impacts do not include Puerto Rico.

Bioscience Research in Connecticut

Bioscience Academic R&D Expenditures, FY 2012



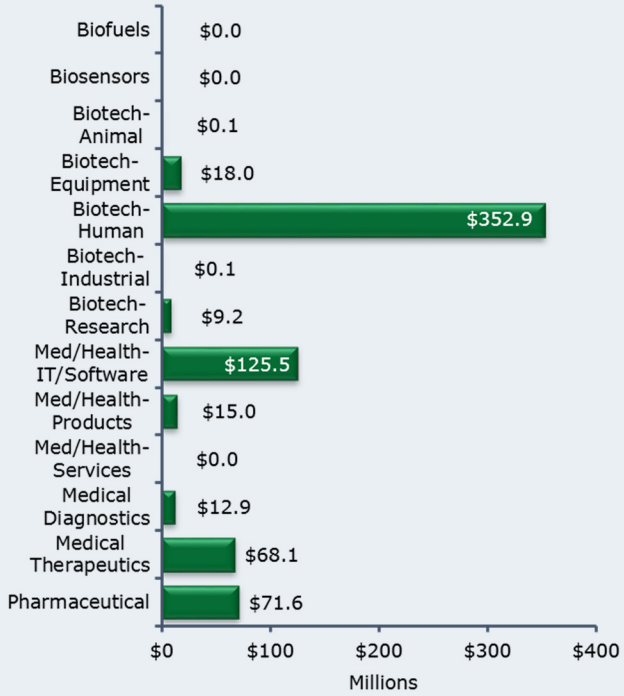
NIH Awards, 2009–2013



Bioscience Venture Capital in Connecticut

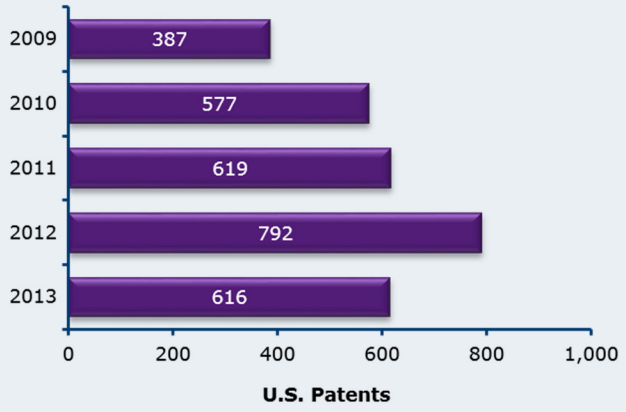
Bioscience-Related Venture Capital Investments, 2009–2013

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

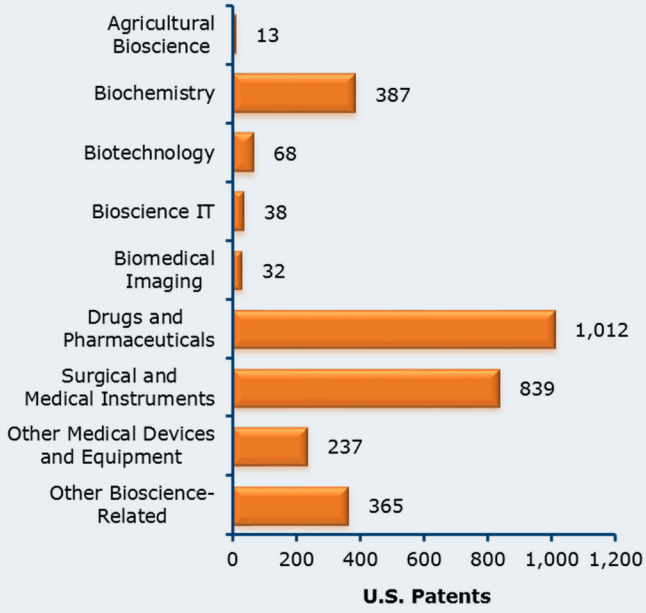


Bioscience Patents in Connecticut

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.