



Connecticut has a sizable and well concentrated bioscience industry, with more than 22,000 employed across 988 individual business establishments in 2016. The industry’s employment base is 7 percent more concentrated than the national average (location quotient is 1.07). Connecticut has a specialized concentration in medical device manufacturing and has an above-average concentration in research, testing and medical labs. Bioscience industry employment has declined since 2014, down 7.5 percent. Connecticut’s universities spent nearly \$917 billion in bioscience-related R&D activities in 2016—a highly concentrated focus in the biosciences at 80 percent of all R&D. The state has a high concentration of NIH funding with \$146 per capita compared with just \$80 per capita for the nation.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Connecticut	United States	Quintile
Bioscience Industry, 2016			
Bioscience Industry Employment	22,146	1,743,639	III
Bioscience Industry Location Quotient	1.07	n/a	II
Bioscience Industry Establishments	988	85,702	III
Academic Bioscience R&D Expenditures, FY 2016			
Bioscience R&D (\$ thousands)	\$916,955	\$41,972,205	II
Bioscience Share of Total R&D	80%	62%	I
Bioscience R&D Per Capita	\$256	\$130	I
NIH Funding, FY 2017			
Funding (\$ thousands)	\$523,841	\$26,150,485	II
Funding Per Capita	\$146	\$80	I
Bioscience Venture Capital Investments, 2014-17 (\$ millions)	\$897.16	\$66,168.62	II
Bioscience and Related Patents, 2014-17	3,493	102,862	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	
	2016	2014-2016 Change	2016	2014-2016 Change
Agricultural Feedstock and Industrial Biosciences				
Establishments	8	-27.3%	1,709	-3.2%
Employment	340	21.2%	68,027	-1.2%
Location Quotient	0.42		n/a	
Direct-Effect Employment Multiplier	6.36			
Total Employment Impact	2,165			
Average Annual Wage	\$81,326	18.8%	\$80,961	2.7%
Bioscience-Related Distribution				
Establishments	354	17.3%	39,149	3.8%
Employment	4,466	7.1%	469,640	3.7%
Location Quotient	0.80		n/a	
Direct-Effect Employment Multiplier	2.15			
Total Employment Impact	9,600			
Average Annual Wage	\$98,407	6.1%	\$93,677	2.7%
Drugs and Pharmaceuticals				
Establishments	27	-15.6%	3,754	13.7%
Employment	2,796	-45.7%	299,113	2.0%
Location Quotient	0.79		n/a	
Direct-Effect Employment Multiplier	4.65			
Total Employment Impact	13,004			
Average Annual Wage	\$148,276	-9.0%	\$113,815	-3.2%
Medical Devices and Equipment				
Establishments	129	0.8%	8,083	5.9%
Employment	7,390	-6.3%	359,293	2.9%
Location Quotient	1.73		n/a	
Direct-Effect Employment Multiplier	2.55			
Total Employment Impact	18,827			
Average Annual Wage	\$77,594	5.0%	\$84,746	6.5%
Research, Testing and Medical Laboratories				
Establishments	470	19.4%	33,007	13.1%
Employment	7,154	11.0%	547,566	8.2%
Location Quotient	1.10		n/a	
Direct-Effect Employment Multiplier	2.36			
Total Employment Impact	16,851			
Average Annual Wage	\$130,247	13.1%	\$106,942	5.5%
Total Bioscience Industry				
Establishments	988	14.0%	85,702	7.7%
Employment	22,146	-7.5%	1,743,639	4.4%
Location Quotient	1.07		n/a	
Direct-Effect Employment Multiplier	2.73			
Total Employment Impact	60,447			
Average Annual Wage	\$107,781	0.4%	\$98,961	3.1%
Total Private Sector				
Establishments	113,121	2.8%	9,243,034	3.4%
Employment	1,435,361	1.3%	120,884,570	4.2%
Average Annual Wage	\$66,579	2.8%	\$53,354	4.3%

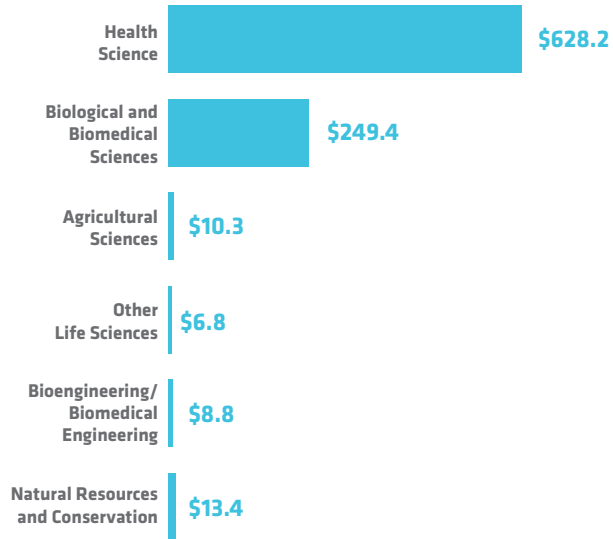
Note: U.S. employment metrics include Puerto Rico.

Bioscience Research in Connecticut

Bioscience Academic R&D Expenditures

\$ Millions

FY 2016



NIH Awards

\$ Millions

FY 2014-2017

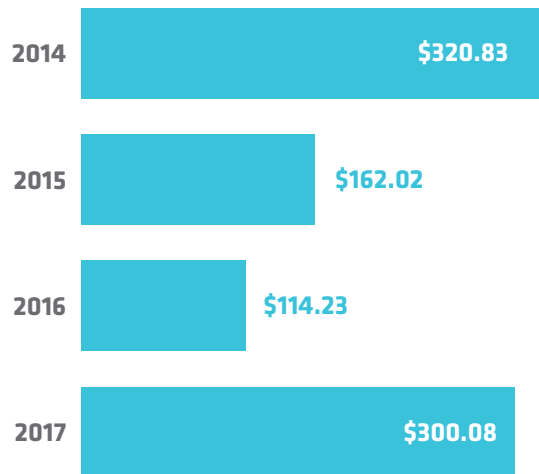


Bioscience Venture Capital in Connecticut

Bioscience-Related Venture Capital Investments

\$ Millions

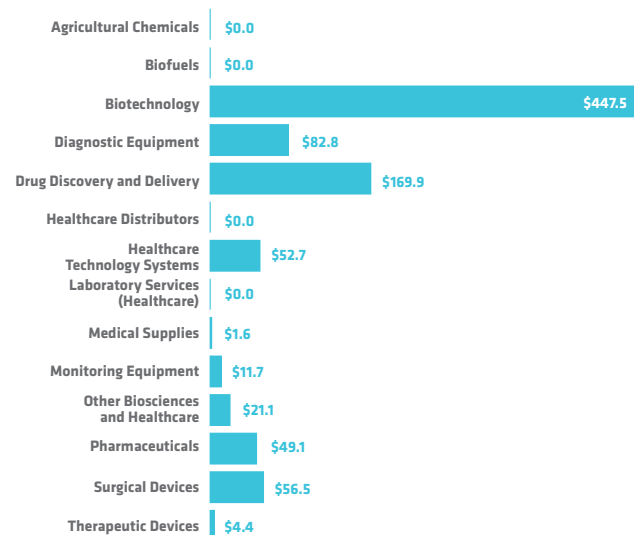
2014-2017



Bioscience-Related Venture Capital Investments by Segment

\$ Millions

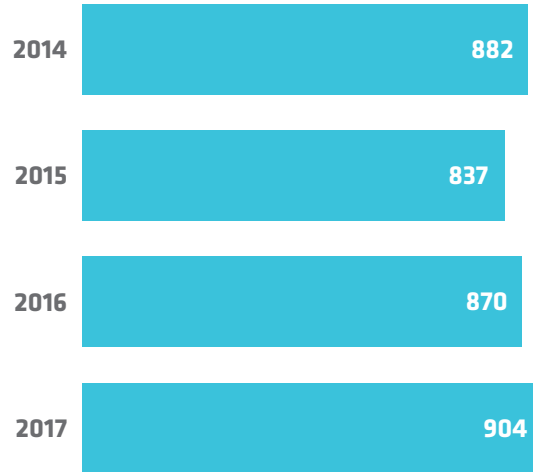
2014-2017



Bioscience Patents in Connecticut

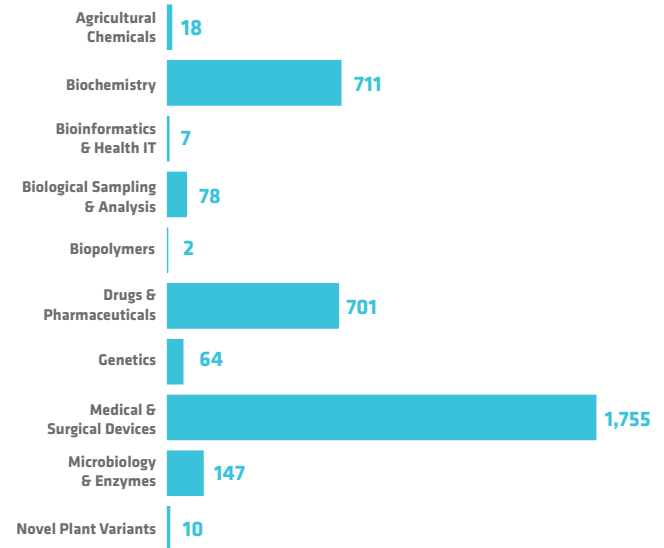
Bioscience-Related U.S. Patents

2014-2017



Bioscience-Related U.S. Patents by Segment

2014-2017



Source Notes

Employment, Establishments and Wages: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), enhanced file from IMPLAN.

Employment Multipliers: IMPLAN 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).

Venture Capital: PitchBook Data, Inc.

Patents: U.S. Patent & Trademark Office data from Clarivate Analytics' Derwent Innovation patent analysis database. For a more detailed discussion of the data and methodology used, please see the Appendix to the full national report.