



Maine's bioscience industry reached 6,630 jobs in 2016 following 3.3 percent growth since 2014. State industry employers have expanded their employment and establishment base, the latter by 15.2 percent since 2014 to operate 255 total bioscience establishments in 2016. Maine's employment growth has come largely from its drugs and pharmaceuticals subsector which grew by 16 percent from 2014 through 2016. This subsector is also considered to have a specialized employment concentration, with a location quotient of 1.57. Maine is also well concentrated in its research, testing and medical labs employment. State institutions have seen an increase in NIH funding in FY 2017, with a total of \$89.4 million awarded.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Maine	United States	Quintile
Bioscience Industry, 2016			
Bioscience Industry Employment	6,630	1,743,639	IV
Bioscience Industry Location Quotient	0.91	n/a	II
Bioscience Industry Establishments	255	85,702	V
Academic Bioscience R&D Expenditures, FY 2016			
Bioscience R&D (\$ thousands)	\$36,256	\$41,972,205	V
Bioscience Share of Total R&D	37%	62%	V
Bioscience R&D Per Capita	\$27	\$130	V
NIH Funding, FY 2017			
Funding (\$ thousands)	\$89,376	\$26,150,485	IV
Funding Per Capita	\$67	\$80	II
Bioscience Venture Capital Investments, 2014-17 (\$ millions)	\$17.20	\$66,168.62	IV
Bioscience and Related Patents, 2014-17	228	102,862	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	Maine		United States	
	2016	2014-2016 Change	2016	2014-2016 Change
Agricultural Feedstock and Industrial Biosciences				
Establishments	9	12.5%	1,709	-3.2%
Employment	105	34.7%	68,027	-1.2%
Location Quotient	0.37		n/a	
Direct-Effect Employment Multiplier	5.82			
Total Employment Impact	614			
Average Annual Wage	\$42,572	-13.7%	\$80,961	2.7%
Bioscience-Related Distribution				
Establishments	101	24.9%	39,149	3.8%
Employment	1,049	-5.7%	469,640	3.7%
Location Quotient	0.53		n/a	
Direct-Effect Employment Multiplier	2.16			
Total Employment Impact	2,269			
Average Annual Wage	\$78,678	25.6%	\$93,677	2.7%
Drugs and Pharmaceuticals				
Establishments	26	23.8%	3,754	13.7%
Employment	1,966	16.4%	299,113	2.0%
Location Quotient	1.57		n/a	
Direct-Effect Employment Multiplier	5.01			
Total Employment Impact	9,847			
Average Annual Wage	\$101,550	1.8%	\$113,815	-3.2%
Medical Devices and Equipment				
Establishments	23	0.0%	8,083	5.9%
Employment	987	-1.8%	359,293	2.9%
Location Quotient	0.65		n/a	
Direct-Effect Employment Multiplier	2.53			
Total Employment Impact	2,500			
Average Annual Wage	\$47,548	0.9%	\$84,746	6.5%
Research, Testing and Medical Laboratories				
Establishments	96	8.3%	33,007	13.1%
Employment	2,522	-0.4%	547,566	8.2%
Location Quotient	1.10		n/a	
Direct-Effect Employment Multiplier	2.21			
Total Employment Impact	5,579			
Average Annual Wage	\$54,380	9.4%	\$106,942	5.5%
Total Bioscience Industry				
Establishments	255	15.2%	85,702	7.7%
Employment	6,630	3.3%	1,743,639	4.4%
Location Quotient	0.91		n/a	
Direct-Effect Employment Multiplier	3.14			
Total Employment Impact	20,808			
Average Annual Wage	\$71,008	9.7%	\$98,961	3.1%
Total Private Sector				
Establishments	49,079	6.5%	9,243,034	3.4%
Employment	506,966	2.5%	120,884,570	4.2%
Average Annual Wage	\$42,084	5.3%	\$53,354	4.3%

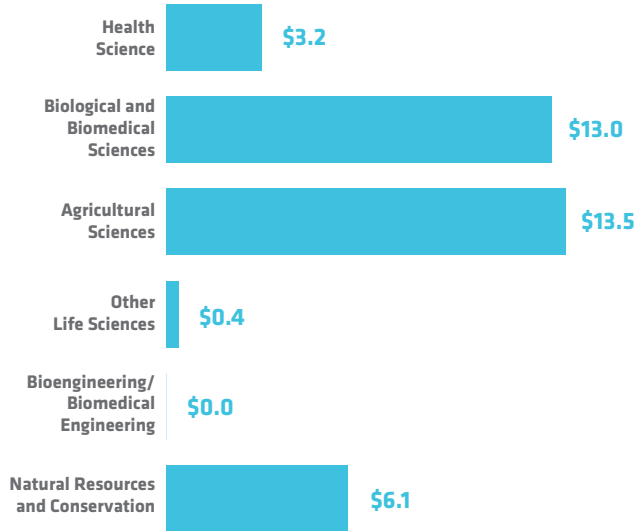
Note: U.S. employment metrics include Puerto Rico.

Bioscience Research in Maine

Bioscience Academic R&D Expenditures

\$ Millions

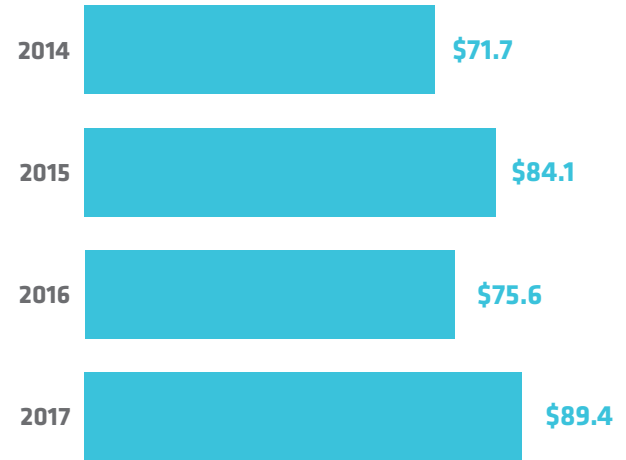
FY 2016



NIH Awards

\$ Millions

FY 2014-2017

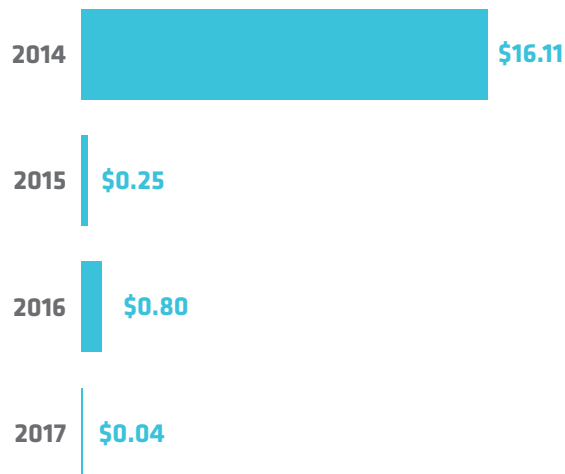


Bioscience Venture Capital in Maine

Bioscience-Related Venture Capital Investments

\$ Millions

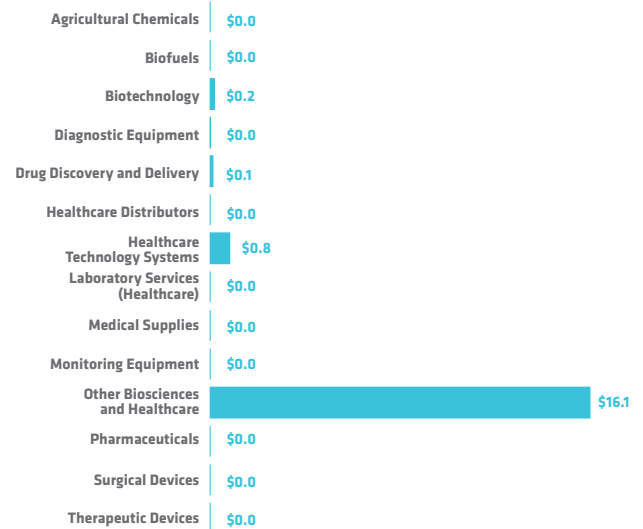
2014-2017



Bioscience-Related Venture Capital Investments by Segment

\$ Millions

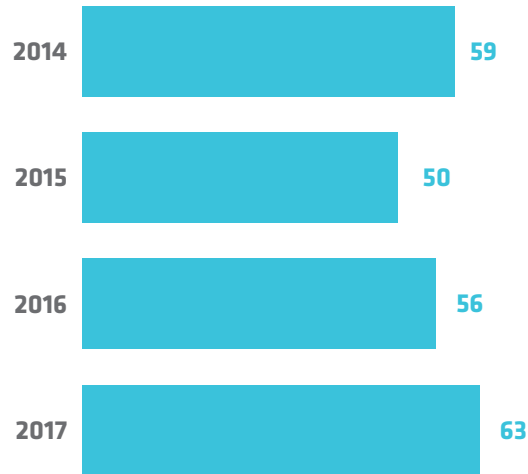
2014-2017



Bioscience Patents in Maine

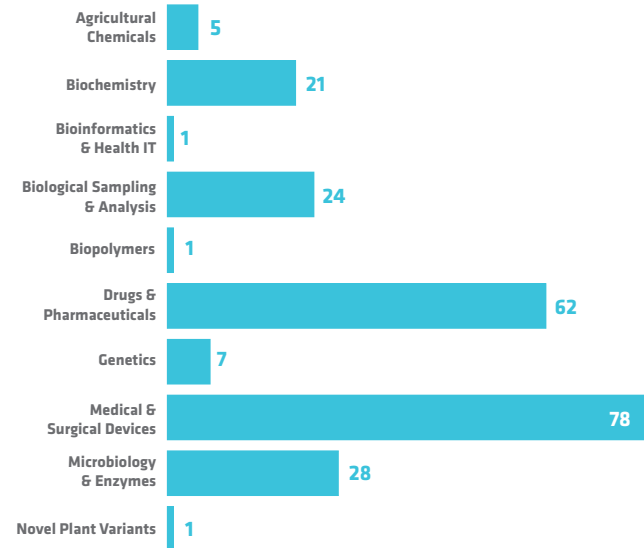
Bioscience-Related U.S. Patents

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.