



Washington, DC bioscience firms employed nearly 3,000 in 2016 while operating 216 individual business establishments. Nearly all of its employment, and most of its establishments are in the research, testing and medical labs subsector, where it has a nearly specialized employment concentration 18 percent above the national average (location quotient is 1.18). The District's universities performed nearly \$313 million in bioscience-related R&D in 2016, a very high concentration relative to the local population but reflecting the activity of its two research universities.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	District of Columbia	United States	Quintile
Bioscience Industry, 2016			
Bioscience Industry Employment	2,930	1,743,639	V
Bioscience Industry Location Quotient	0.40	n/a	V
Bioscience Industry Establishments	216	85,702	V
Academic Bioscience R&D Expenditures, FY 2016			
Bioscience R&D (\$ thousands)	\$312,946	\$41,972,205	III
Bioscience Share of Total R&D	65%	62%	III
Bioscience R&D Per Capita	\$457	\$130	I
NIH Funding, FY 2017			
Funding (\$ thousands)	\$227,291	\$26,150,485	III
Funding Per Capita	\$328	\$80	I
Bioscience Venture Capital Investments, 2014-17 (\$ millions)	\$110.39	\$66,168.62	III
Bioscience and Related Patents, 2014-17	346	102,862	IV

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	District of Columbia		United States	
	2016	2014-2016 Change	2016	2014-2016 Change
Agricultural Feedstock and Industrial Biosciences				
Establishments	1	0.0%	1,709	-3.2%
Employment	1	-51.8%	68,027	-1.2%
Location Quotient	0.01		n/a	
Direct-Effect Employment Multiplier	1.60			
Total Employment Impact	2			
Average Annual Wage	\$141,478	-5.6%	\$80,961	2.7%
Bioscience-Related Distribution				
Establishments	25	44.2%	39,149	3.8%
Employment	49	-2.5%	469,640	3.7%
Location Quotient	0.02		n/a	
Direct-Effect Employment Multiplier	1.55			
Total Employment Impact	75			
Average Annual Wage	\$217,386	-7.6%	\$93,677	2.7%
Drugs and Pharmaceuticals				
Establishments	13	44.4%	3,754	13.7%
Employment	90	-25.0%	299,113	2.0%
Location Quotient	0.07		n/a	
Direct-Effect Employment Multiplier	2.14			
Total Employment Impact	193			
Average Annual Wage	\$325,410	3.3%	\$113,815	-3.2%
Medical Devices and Equipment				
Establishments	8	166.7%	8,083	5.9%
Employment	49	408.5%	359,293	2.9%
Location Quotient	0.03		n/a	
Direct-Effect Employment Multiplier	1.66			
Total Employment Impact	81			
Average Annual Wage	\$100,106	-42.1%	\$84,746	6.5%
Research, Testing and Medical Laboratories				
Establishments	170	15.0%	33,007	13.1%
Employment	2,741	-3.9%	547,566	8.2%
Location Quotient	1.18		n/a	
Direct-Effect Employment Multiplier	1.80			
Total Employment Impact	4,937			
Average Annual Wage	\$107,205	13.3%	\$106,942	5.5%
Total Bioscience Industry				
Establishments	216	21.8%	85,702	7.7%
Employment	2,930	-3.5%	1,743,639	4.4%
Location Quotient	0.40		n/a	
Direct-Effect Employment Multiplier	1.80			
Total Employment Impact	5,288			
Average Annual Wage	\$115,632	9.1%	\$98,961	3.1%
Total Private Sector				
Establishments	36,128	12.8%	9,243,034	3.4%
Employment	513,641	4.8%	120,884,570	4.2%
Average Annual Wage	\$82,486	4.2%	\$53,354	4.3%

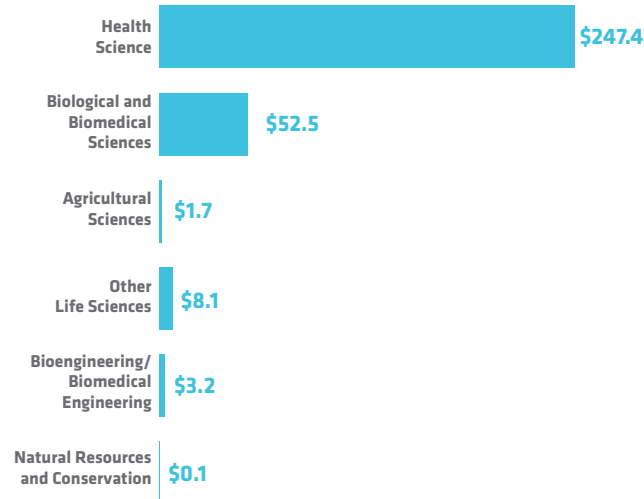
Note: U.S. employment metrics include Puerto Rico.

Bioscience Research in the District of Columbia

Bioscience Academic R&D Expenditures

\$ Millions

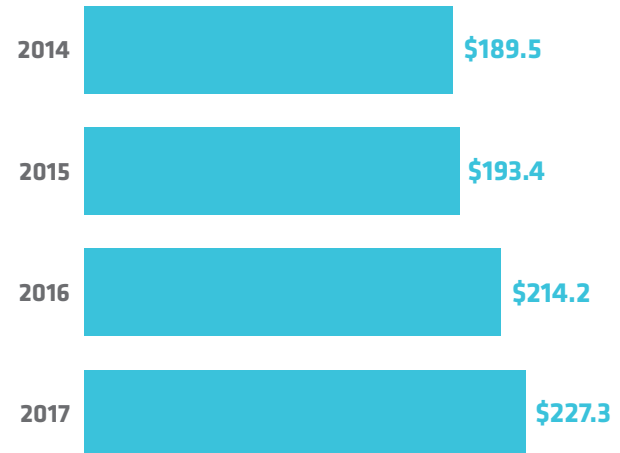
FY 2016



NIH Awards

\$ Millions

FY 2014-2017

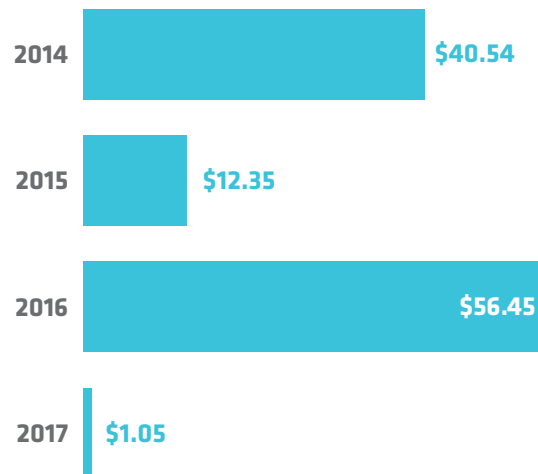


Bioscience Venture Capital in the District of Columbia

Bioscience-Related Venture Capital Investments

\$ Millions

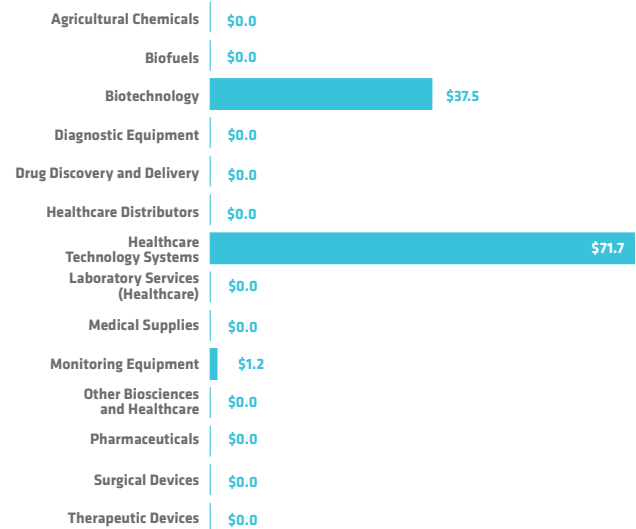
2014-2017



Bioscience-Related Venture Capital Investments by Segment

\$ Millions

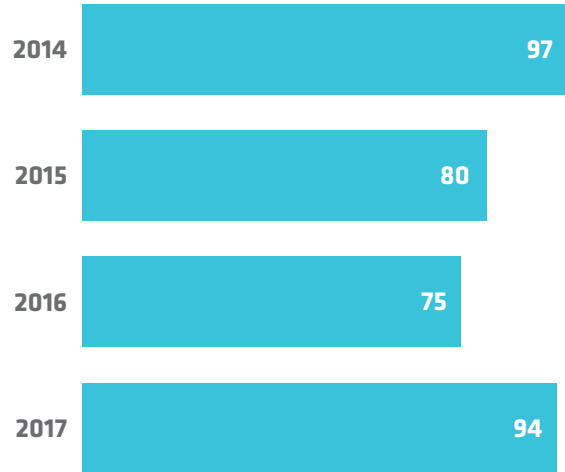
2014-2017



Bioscience Patents in the District of Columbia

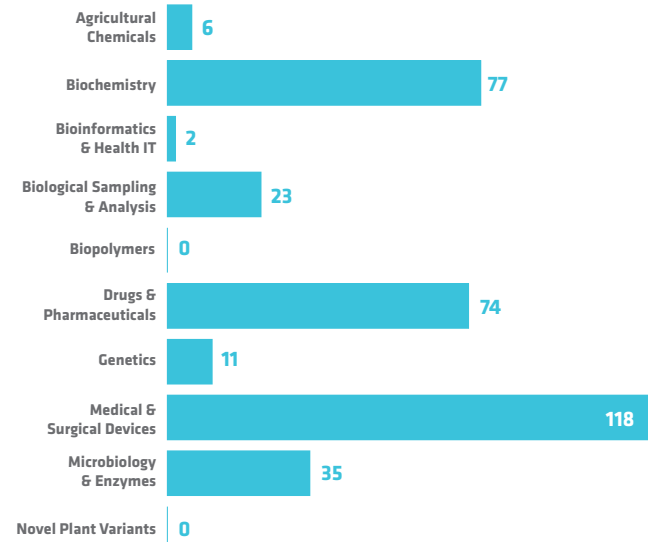
Bioscience-Related U.S. Patents

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.

