



TEconomy/BIO

The Value of Bioscience Innovation in Growing Jobs and Improving Quality of Life 2016

## District of Columbia

Bioscience industry employment in Washington, D.C. totaled just over 2,000 jobs that spanned 164 business establishments in 2014. Nearly all of these jobs are in the research, testing, and medical labs subsector which has increased employment since 2012. The District has little presence in the manufacturing oriented subsectors of the industry. Washington, D.C. stands out in its high concentration of bioscience and biomedical R&D. Its universities combined to spend more than \$322 million in bioscience-related research in 2014 placing it among the top tier of states in its concentration of R&D per capita. Likewise, its research institutions received \$193 million in funding from NIH in 2015, again among the top tier of states in its per capita concentration of this key biomedical funding stream.

### Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	District of Columbia	United States	Quintile
<b>Bioscience Industry, 2014</b>			
Bioscience Industry Employment	2,073	1,655,680	V
Bioscience Industry Location Quotient	0.30	n/a	V
Bioscience Industry Establishments	164	77,283	V
<b>Academic Bioscience R&amp;D Expenditures, FY 2014</b>			
Bioscience R&D (\$ thousands)	\$322,365	\$38,873,926	III
Bioscience Share of Total R&D	66%	61%	II
Bioscience R&D Per Capita	\$489	\$122	I
<b>NIH Funding, FY 2015</b>			
Funding (\$ thousands)	\$193,374	\$22,869,746	III
Funding Per Capita	\$288	\$71	I
<b>Bioscience Venture Capital Investments, 2012–15 (\$ millions)</b>	\$91.1	\$48,742.10	III
<b>Bioscience and Related Patents, 2012–15</b>	322	101,026	IV

State ranking figures for bioscience performance metrics are calculated as quintiles, where:

top quintile — I II III IV V — bottom quintile

For source notes, see end of State Profile.



**District of Columbia**

Industry Subsector	District of Columbia		United States	
	2014	2012–2014 Change	2014	2012–2014 Change
<b>Agricultural Feedstock and Chemicals</b>				
Establishments	1	-50.0%	1,811	2.2%
Employment	3	-44.3%	77,545	1.5%
Location Quotient	0.01		n/a	
Direct-Effect Employment Multiplier	12.1		18.4	
Total Employment Impact	37		1,432,125	
Average Annual Wage	\$149,933	-64.3%	\$80,640	6.3%
<b>Bioscience-Related Distribution</b>				
Establishments	56	-0.6%	37,833	2.8%
Employment	205	29.2%	452,325	2.3%
Location Quotient	0.11		n/a	
Direct-Effect Employment Multiplier	2.3		3.0	
Total Employment Impact	466		1,358,820	
Average Annual Wage	\$244,342	22.3%	\$90,458	6.2%
<b>Drugs and Pharmaceuticals</b>				
Establishments	9	-10.0%	3,301	8.0%
Employment	120	-14.9%	293,353	3.2%
Location Quotient	0.10		n/a	
Direct-Effect Employment Multiplier	7.1		11.0	
Total Employment Impact	851		3,242,627	
Average Annual Wage	\$314,939	17.5%	\$117,524	10.3%
<b>Medical Devices and Equipment</b>				
Establishments	3	-25.0%	7,636	5.5%
Employment	10	-82.1%	349,045	-0.1%
Location Quotient	0.01		n/a	
Direct-Effect Employment Multiplier	3.5		4.6	
Total Employment Impact	33		1,596,802	
Average Annual Wage	\$172,767	170.3%	\$79,537	5.1%
<b>Research, Testing, and Medical Laboratories</b>				
Establishments	95	-4.9%	26,702	10.2%
Employment	1,736	3.4%	483,412	3.4%
Location Quotient	0.85		n/a	
Direct-Effect Employment Multiplier	2.6		3.1	
Total Employment Impact	4,483		1,554,719	
Average Annual Wage	\$93,840	1.1%	\$97,485	6.8%
<b>Total Bioscience Industry</b>				
Establishments	164	-4.8%	77,283	5.7%
Employment	2,073	1.8%	1,655,680	2.2%
Location Quotient	0.30		n/a	
Direct-Effect Employment Multiplier	3.9		5.5	
Total Employment Impact	8,071		9,185,094	
Average Annual Wage	\$121,933	7.5%	\$94,543	7.2%
<b>Total Private Sector</b>				
Establishments	32,019	-4.1%	8,937,672	2.7%
Employment	490,033	4.2%	116,018,300	4.4%
Average Annual Wage	\$79,132	3.5%	\$51,148	4.3%

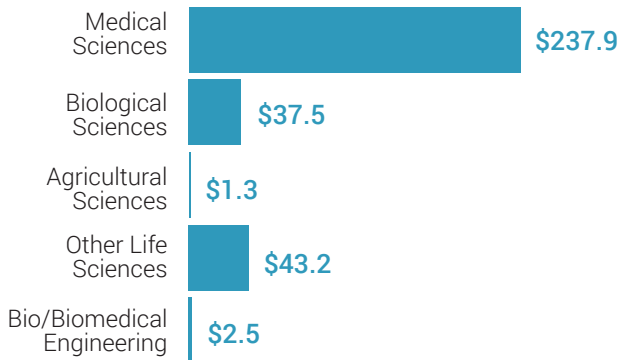
Note: U.S. employment metrics include Puerto Rico.



### District of Columbia

## Bioscience Research in District of Columbia

Bioscience Academic R&D Expenditures  
\$ Millions  
FY 2014

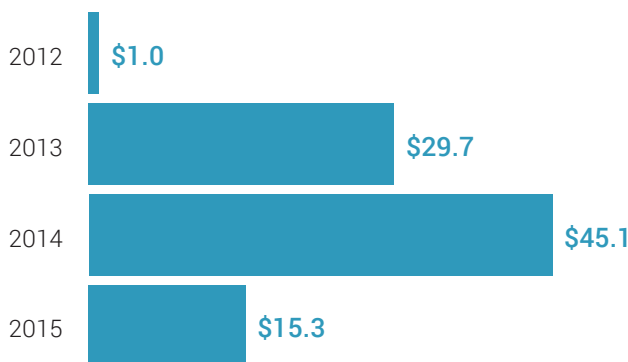


NIH Awards  
\$ Millions  
FY 2012-2015

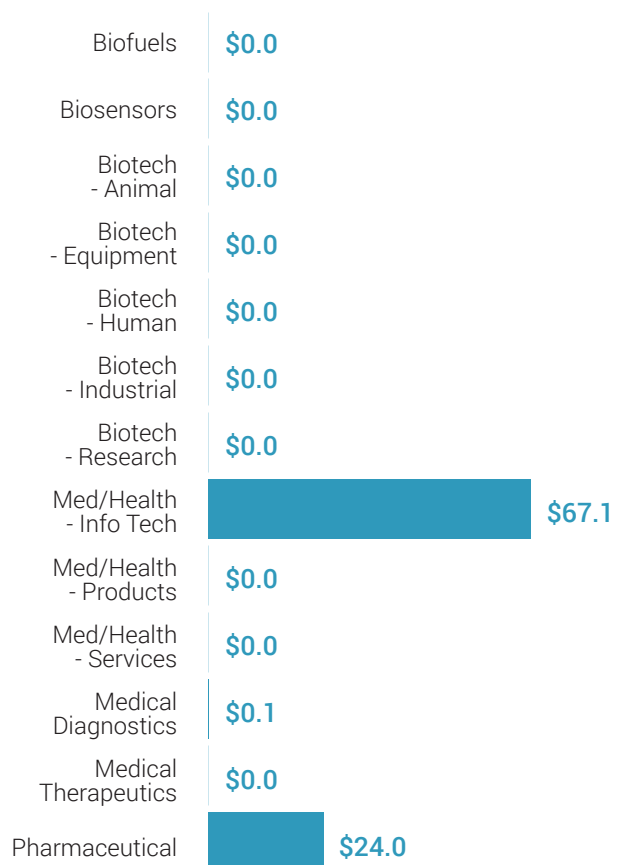


## Bioscience Venture in District of Columbia

Bioscience-Related Venture  
Capital Investments  
\$ Millions  
2012-2015



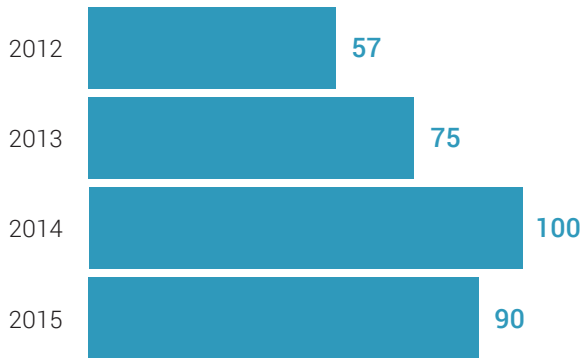
Bioscience-Related Venture  
Capital Investments by Segment  
\$ Millions  
2012-2015



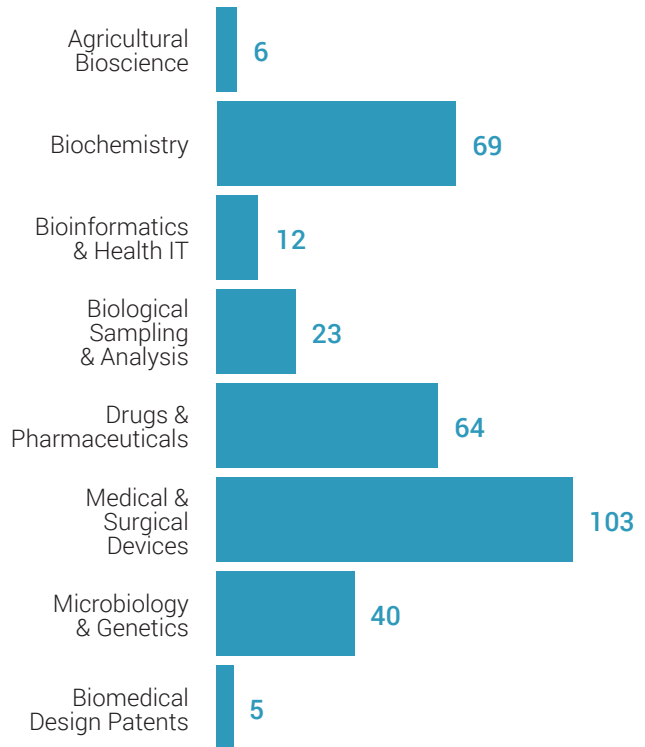


Bioscience Patents in District of Columbia

Bioscience-Related U.S. Patents 2012-2015



Bioscience-Related U.S. Patents by Segment 2012-2015



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).

**Venture Capital:** Thomson Reuters Thomson ONE venture capital database.

**Patents:** U.S. Patent & Trademark Office data from Thomson Reuters Thomson Innovation patent analysis database.

For a more detailed discussion of the data and methodology used, please see the Appendix to the full national report.

