



TEconomy/BIO

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

Oregon

Oregon’s growing bioscience industry reached 14,000 jobs in 2014 across 845 state business establishments. State bioscience companies have increased employment by 3.5 percent since 2012, with job growth coming from four of the five industry subsectors. Oregon’s research universities are especially focused in the biosciences relative to other fields with their nearly \$456 million in bioscience academic R&D in 2014 accounting for 68 percent of all academic research compared with 61 percent for the nation. In 2015, NIH research funding to Oregon institutions totaled nearly \$289 million. Venture capital investments in Oregon’s bioscience-related companies have increased in recent years and since 2012 have totaled just over \$62 million.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Oregon	United States	Quintile
Bioscience Industry, 2014			
Bioscience Industry Employment	14,037	1,655,680	III
Bioscience Industry Location Quotient	0.68	n/a	IV
Bioscience Industry Establishments	845	77,283	III
Academic Bioscience R&D Expenditures, FY 2014			
Bioscience R&D (\$ thousands)	\$455,569	\$38,873,926	III
Bioscience Share of Total R&D	68%	61%	II
Bioscience R&D Per Capita	\$115	\$122	II
NIH Funding, FY 2015			
Funding (\$ thousands)	\$288,575	\$22,869,746	II
Funding Per Capita	\$72	\$71	II
Bioscience Venture Capital Investments, 2012–15 (\$ millions)	\$62.1	\$48,742.10	III
Bioscience and Related Patents, 2012–15	1,343	101,026	III

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.



Industry Subsector	Oregon		United States	
	2014	2012–2014 Change	2014	2012–2014 Change
Agricultural Feedstock and Chemicals				
Establishments	37	2.8%	1,811	2.2%
Employment	543	16.3%	77,545	1.5%
Location Quotient	0.56		n/a	
Direct-Effect Employment Multiplier	15.4		18.4	
Total Employment Impact	8,357		1,432,125	
Average Annual Wage	\$60,068	5.6%	\$80,640	6.3%
Bioscience-Related Distribution				
Establishments	345	2.7%	37,833	2.8%
Employment	4,545	5.7%	452,325	2.3%
Location Quotient	0.80		n/a	
Direct-Effect Employment Multiplier	3.0		3.0	
Total Employment Impact	13,586		1,358,820	
Average Annual Wage	\$62,796	5.1%	\$90,458	6.2%
Drugs and Pharmaceuticals				
Establishments	40	2.6%	3,301	8.0%
Employment	783	-10.5%	293,353	3.2%
Location Quotient	0.21		n/a	
Direct-Effect Employment Multiplier	10.9		11.0	
Total Employment Impact	8,556		3,242,627	
Average Annual Wage	\$57,449	23.8%	\$117,524	10.3%
Medical Devices and Equipment				
Establishments	118	-0.8%	7,636	5.5%
Employment	4,253	2.1%	349,045	-0.1%
Location Quotient	0.97		n/a	
Direct-Effect Employment Multiplier	4.4		4.6	
Total Employment Impact	18,897		1,596,802	
Average Annual Wage	\$70,789	8.7%	\$79,537	5.1%
Research, Testing, and Medical Laboratories				
Establishments	305	11.9%	26,702	10.2%
Employment	3,913	4.4%	483,412	3.4%
Location Quotient	0.65		n/a	
Direct-Effect Employment Multiplier	2.9		3.1	
Total Employment Impact	11,449		1,554,719	
Average Annual Wage	\$70,929	5.3%	\$97,485	6.8%
Total Bioscience Industry				
Establishments	845	5.3%	77,283	5.7%
Employment	14,037	3.5%	1,655,680	2.2%
Location Quotient	0.68		n/a	
Direct-Effect Employment Multiplier	4.8		5.5	
Total Employment Impact	67,203		9,185,094	
Average Annual Wage	\$67,081	7.3%	\$94,543	7.2%
Total Private Sector				
Establishments	130,728	3.0%	8,937,672	2.7%
Employment	1,453,935	6.1%	116,018,300	4.4%
Average Annual Wage	\$45,898	5.1%	\$51,148	4.3%

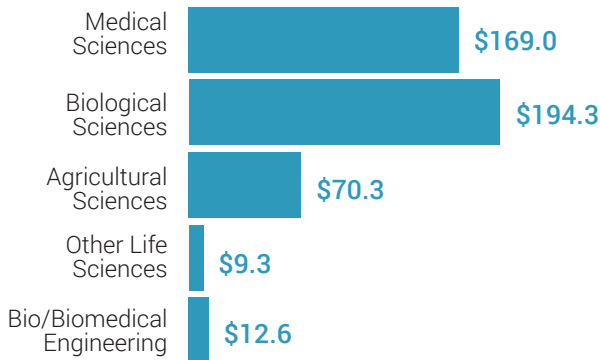
Note: U.S. employment metrics include Puerto Rico.



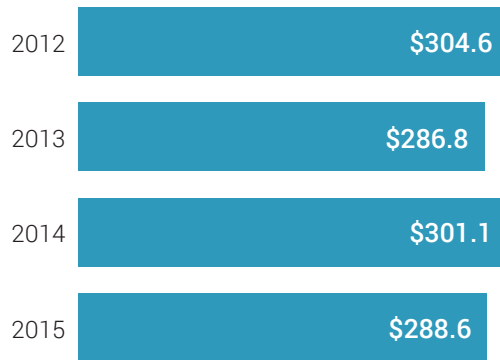
Oregon

Bioscience Research in Oregon

Bioscience Academic R&D Expenditures
\$ Millions
FY 2014

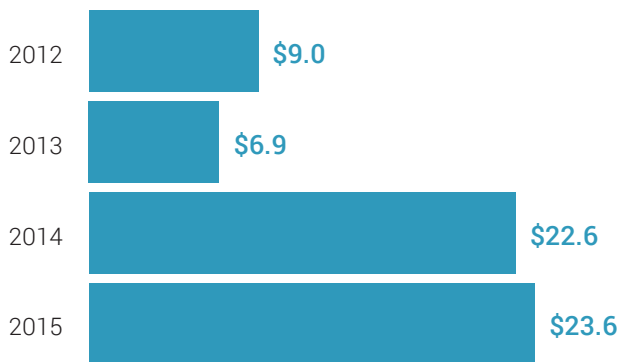


NIH Awards
\$ Millions
FY 2012-2015

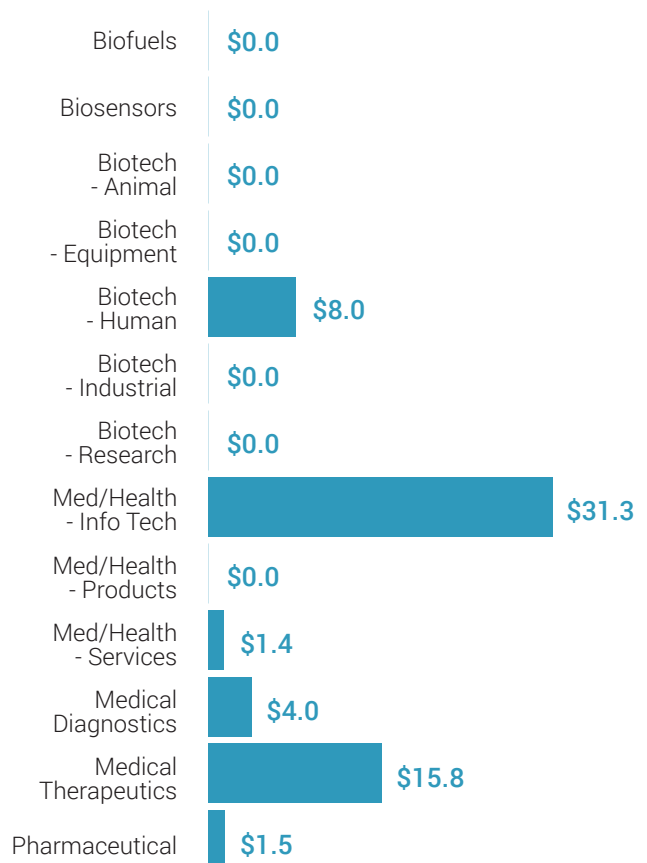


Bioscience Venture Capital in Oregon

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



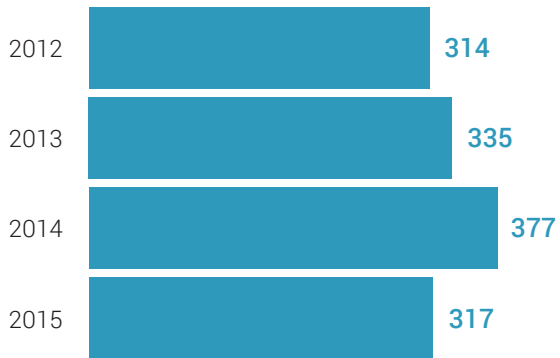
Bioscience-Related Venture
Capital Investments by Segment
\$ Millions
2012-2015



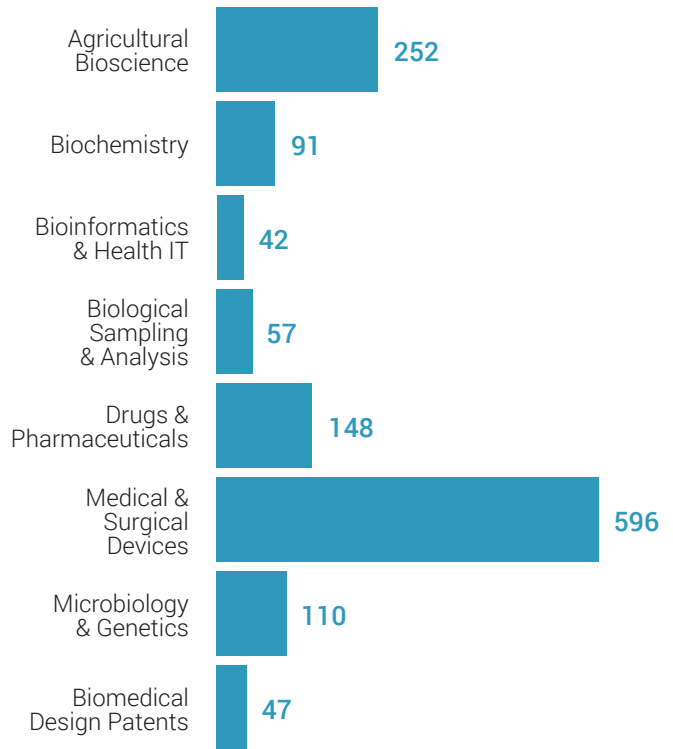


Bioscience Patents in Oregon

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.

