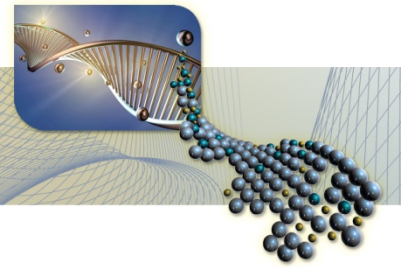


# OREGON



The bioscience industry in Oregon has generally outpaced job growth compared with the national sector since 2001. The largest State bioscience subsector is medical devices and equipment (5,565 jobs). Academic bioscience research and development expenditures in Oregon reached \$399 million in 2008, led by nearly equal amounts in the biological and medical sciences. Both academic R&D in the biosciences and funding from the National Institutes of Health are well concentrated in Oregon with per capita figures that are above average. NIH baseline funding has increased by 8.7 percent since 2004, and when the additional funds from the American Recovery and Reinvestment Act (ARRA) are taken into account this growth rate reaches 30.4 percent. During the last six years, \$109 million in venture capital was invested in State bioscience companies, mainly in pharmaceuticals and medical/health information technology. The 879 bioscience patents issued over the same six-year period were well diversified across fields.

## ●●● Bioscience Performance Metrics

### Summary of State Performance in Selected Bioscience-related Metrics

Metrics	Oregon	United States	Rank*
<b>Bioscience Industry, 2008</b>			
Total Bioscience Industry Employment, 2008	11,278	1,420,324	III
Bioscience Industry Location Quotient, 2008	0.63	n/a	IV
Biosciences Industry Establishments, 2008	679	47,593	III
<b>Academic R&amp;D Expenditures, FY 2008</b>			
Bioscience R&D (\$ thousands)	\$399,376	\$31,818,810	25
Bioscience Share of Total R&D	67.1%	61.3%	12
Bioscience R&D Per Capita	\$105.57	\$104.54	19
Change in Bioscience R&D, FY 2004–08	17.8%	22.3%	30
<b>NIH Funding, FY 2009</b>			
Total, Including ARRA Funds (\$ thousands)	\$336,385	\$25,837,590	21
Per Capita Funding	\$87.93	\$84.16	14
Change in Baseline Funding, FY 2004–09**	8.7%	-4.7%	11
Change in Total Funding, FY 2004–09	30.4%	14.6%	17
<b>Clinical Trials, Initiated 2009</b>	334	5,299	24
<b>Higher Education Degrees in Bioscience Fields, AY 2008</b>	1,869	161,811	30
<b>Employment in Bioscience-related Occupations, 2008</b>	9,860	717,510	24
<b>Bioscience Venture Capital Investments, 2004–09 (\$ millions)</b>	\$108.8	\$60,099	33
<b>Bioscience and Related Patents, 2004–09</b>	879	75,593	27

\*State ranking figures for bioscience industry employment metrics are calculated as quintiles (I=Top Quintile; V=Bottom Quintile). All other metrics are ranked 1-52.

\*\*Baseline Funding does not include American Recovery and Reinvestment Act (ARRA) funds for 2009.

For source notes, see end of State Profile.

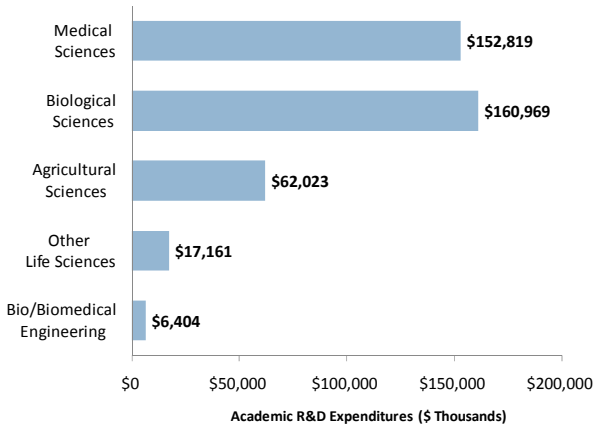
## ●●● Bioscience Industry Base, 2008

INDUSTRY SUBSECTOR	Oregon		United States	
	2008	2001-08 Change	2008	2001-08 Change
<b>AGRICULTURAL FEEDSTOCK &amp; CHEMICALS</b>				
Establishments	38	95.3%	2,440	16.0%
Employment	718	104.1%	114,793	1.9%
Location Quotient	0.50		n/a	
Direct-Effect Employment Multiplier	5.52		11.33	
Total Employment Impact	3,959		1,284,650	
Average Annual Wage	\$59,446		\$72,279	
<b>DRUGS &amp; PHARMACEUTICALS</b>				
Establishments	35	-7.9%	2,771	6.4%
Employment	870	13.7%	311,882	2.3%
Location Quotient	0.22		n/a	
Direct-Effect Employment Multiplier	3.63		9.92	
Total Employment Impact	3,162		2,873,278	
Average Annual Wage	\$39,672		\$93,378	
<b>MEDICAL DEVICES &amp; EQUIPMENT</b>				
Establishments	295	10.5%	15,227	0.4%
Employment	5,565	32.6%	435,509	2.0%
Location Quotient	1.01		n/a	
Direct-Effect Employment Multiplier	2.82		4.87	
Total Employment Impact	15,711		2,029,581	
Average Annual Wage	\$53,216		\$63,606	
<b>RESEARCH, TESTING, &amp; MEDICAL LABORATORIES</b>				
Establishments	311	41.7%	27,154	57.7%
Employment	4,126	45.7%	558,140	46.1%
Location Quotient	0.59		n/a	
Direct-Effect Employment Multiplier	2.26		3.30	
Total Employment Impact	9,342		1,853,127	
Average Annual Wage	\$63,219		\$80,785	
<b>TOTAL BIOSCIENCES INDUSTRY</b>				
Establishments	679	24.8%	47,593	28.3%
Employment	11,278	38.5%	1,420,324	15.8%
Location Quotient	0.63		n/a	
Direct-Effect Employment Multiplier	2.85		5.82	
Total Employment Impact	32,175		8,040,636	
Average Annual Wage	\$56,227		\$77,595	
<b>TOTAL PRIVATE SECTOR</b>				
Establishments	126,121	14.9%	8,860,956	13.8%
Employment	1,437,750	7.0%	113,917,377	3.5%
Average Annual Wage	\$39,972		\$45,229	

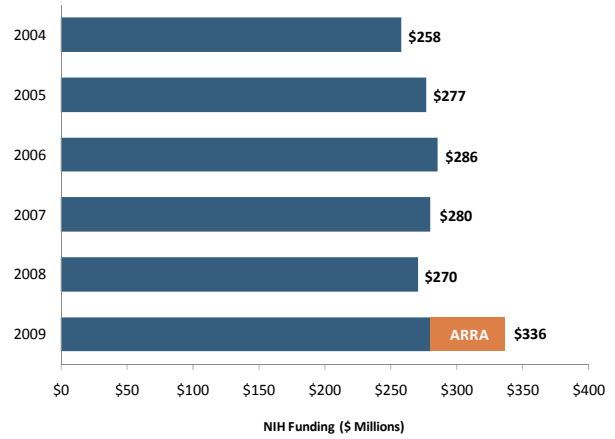
Note: U.S. employment metrics include Puerto Rico. Estimates of total employment impacts do not include Puerto Rico.

## ●●● Bioscience Performance Metrics

**Bioscience Academic R&D Expenditures in Oregon, FY 2008**

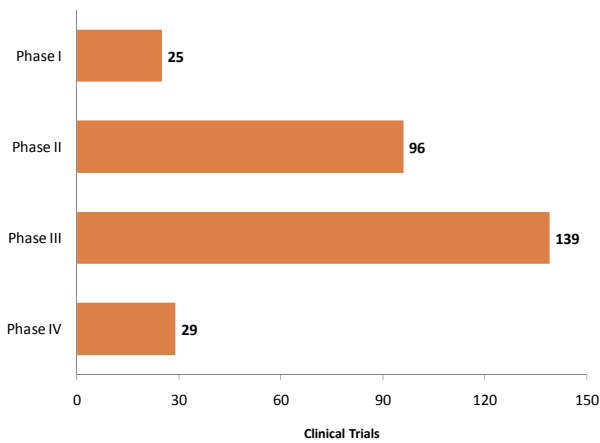


**NIH Awards in Oregon, 2004–2009**

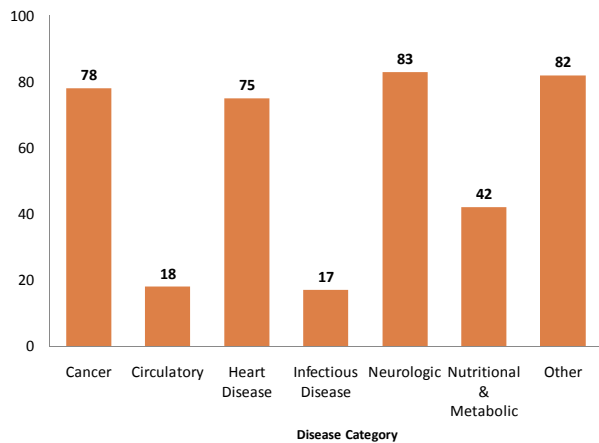


## ●●● Recent Clinical Trial Activities

**Clinical Trials by Phase in Oregon, 2009**

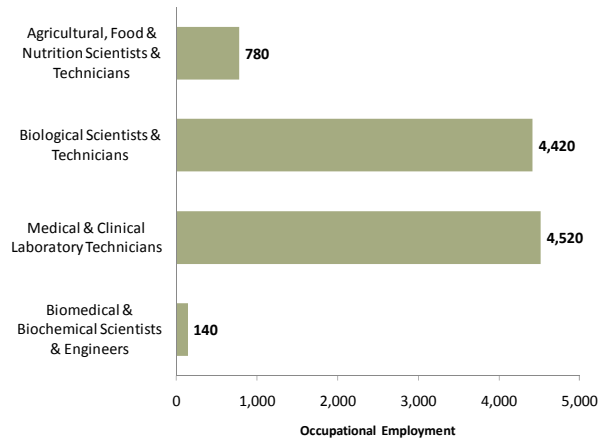


**Clinical Trials by Major Disease Category in Oregon, 2009**

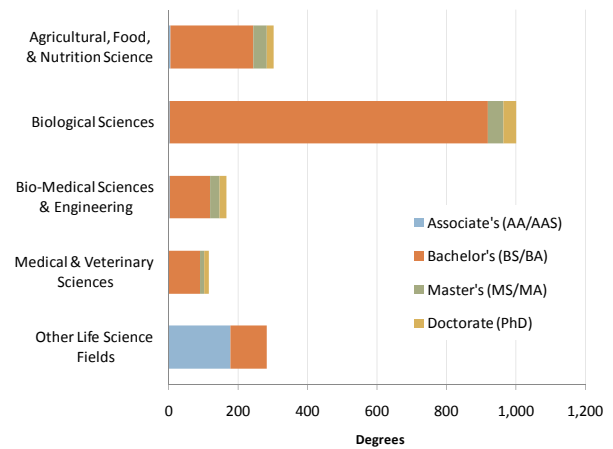


## Bioscience Talent Base

**Bioscience-related Occupational Employment in Oregon, 2008**

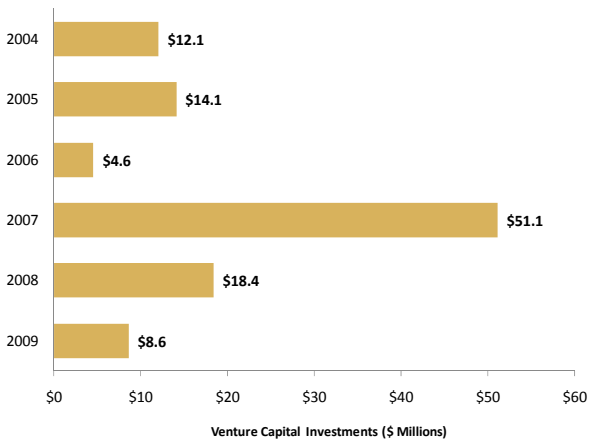


**Bioscience-related Degrees in Oregon, AY 2008**

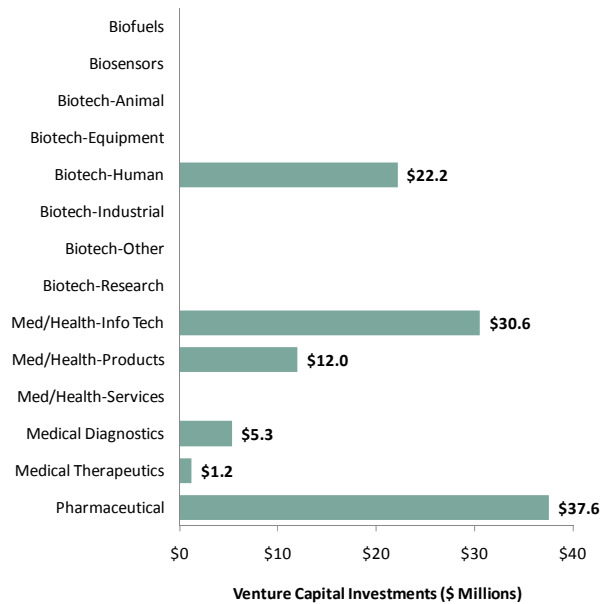


## Bioscience Venture Capital

**Bioscience-related Venture Capital Investments in Oregon, 2004–2009**

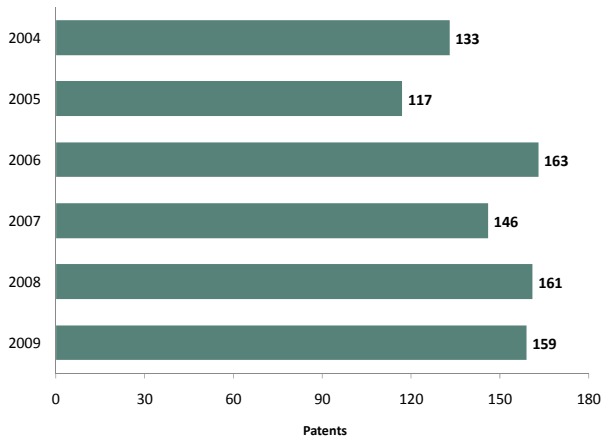


**Bioscience-related Venture Capital Investments in Oregon by Segment, 2004–2009**

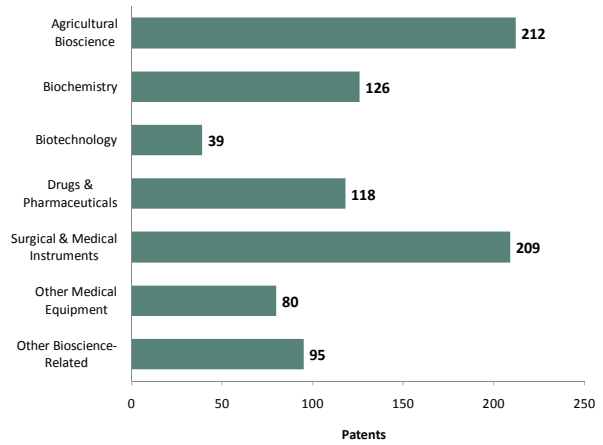


## ●●● Bioscience Patents

**Bioscience-related Patents in Oregon, 2004–2009**



**Bioscience-related Patents by Classification Group in Oregon, 2004–2009**



### State Bioscience Contacts

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### Source Notes:

**Employment, Establishment, and Wage Data:** U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW) industry data provided by the Minnesota IMPLAN Group, 2001 and 2008.

**Employment Multipliers:** U.S. Bureau of Economic Analysis RIMS II Employment Multipliers, 2006 (most currently available).

**Academic R&D Expenditures:** National Science Foundation (NSF) Survey of Research and Development Expenditures at Universities and Colleges, 2004 and 2008.

**NIH Funding:** National Institutes of Health, Office of Extramural Research, Award Trends, Dollars Awarded by State, 2004 and 2009.

**Clinical Trials:** National Institutes of Health, [Clinicaltrials.gov](http://Clinicaltrials.gov), trials that were initiated in 2009.

**Higher Education Degrees:** National Center for Educational Statistics, Integrated Postsecondary Education Data System (IPEDS), 2008.

**Occupational Employment:** U.S. Bureau of Labor Statistics, Occupational Employment Statistics (OES) survey data, 2008.

**Venture Capital:** Thomson Reuters' VentureXpert Database, 2004–2009, as of January 15, 2010.

**Patents:** U.S. Patent & Trademark Office data as available from the Thomson Reuters' Delphion Patent Analysis Database, 2004–2009, as of January 15, 2010.

For a more detailed discussion of the data and methodology used, please see the Appendix to the full national report. ©2010