

The bioscience subsector with the largest employment in Alaska is research, testing and medical laboratories with just over 500 jobs in 2008. Employment in the subsector outpaced the rapid growth of the national subsector during the 7-year period ending in 2008. NIH funding to Alaskan institutions totaled \$16.3 million in 2009 and increased by 51 percent compared with 2004 largely due to additional funding in 2009 from the American Recovery and Reinvestment Act (ARRA). The State's 22 bioscience patents in the same period were mainly in the categories of other medical equipment and drugs and pharmaceuticals.

●●● Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metrics	Alaska	United States	Rank*
Bioscience Industry, 2008			
Total Bioscience Industry Employment, 2008	681	1,420,324	V
Bioscience Industry Location Quotient, 2008	0.23	n/a	V
Biosciences Industry Establishments, 2008	91	47,593	V
Academic R&D Expenditures, FY 2008			
Bioscience R&D (\$ thousands)	\$28,355	\$31,818,810	52
Bioscience Share of Total R&D	25.4%	61.3%	52
Bioscience R&D Per Capita	\$41.21	\$104.54	49
Change in Bioscience R&D, FY 2004–08	-3.9%	22.3%	50
NIH Funding, FY 2009			
Total, Including ARRA Funds (\$ thousands)	\$16,285	\$25,837,590	49
Per Capita Funding	\$23.32	\$84.16	45
Change in Baseline Funding, FY 2004–09**	-4.7%	-4.7%	30
Change in Total Funding, FY 2004–09	51.2%	14.6%	4
Clinical Trials, Initiated 2009	14	5,299	52
Higher Education Degrees in Bioscience Fields, AY 2008	139	161,811	52
Employment in Bioscience-related Occupations, 2008	1,870	717,510	47
Bioscience Venture Capital Investments, 2004–09 (\$ millions)	\$0.0	\$60,099	51
Bioscience and Related Patents, 2004–09	22	75,593	52

*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.

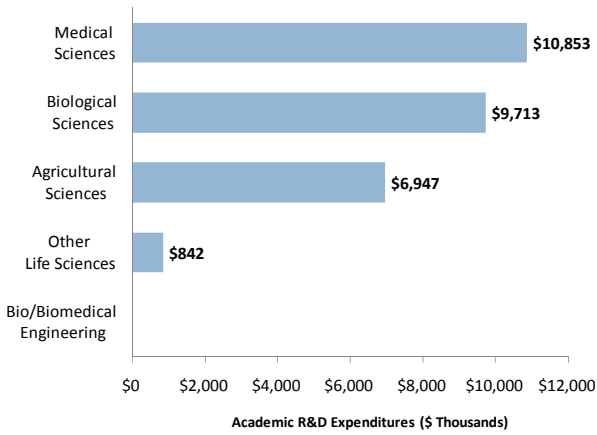
●●● Bioscience Industry Base, 2008

INDUSTRY SUBSECTOR	Alaska		United States	
	2008	2001–08 Change	2008	2001–08 Change
AGRICULTURAL FEEDSTOCK & CHEMICALS				
Establishments	2	-81.5%	2,440	16.0%
Employment	19	-92.0%	114,793	1.9%
Location Quotient	0.08		n/a	
Direct-Effect Employment Multiplier	3.09		11.33	
Total Employment Impact	60		1,284,650	
Average Annual Wage	\$100,680		\$72,279	
DRUGS & PHARMACEUTICALS				
Establishments	1	18.6%	2,771	6.4%
Employment	25	855.6%	311,882	2.3%
Location Quotient	0.04		n/a	
Direct-Effect Employment Multiplier	2.45		9.92	
Total Employment Impact	62		2,873,278	
Average Annual Wage	\$125,072		\$93,378	
MEDICAL DEVICES & EQUIPMENT				
Establishments	24	41.2%	15,227	0.4%
Employment	121	72.7%	435,509	2.0%
Location Quotient	0.13		n/a	
Direct-Effect Employment Multiplier	1.83		4.87	
Total Employment Impact	222		2,029,581	
Average Annual Wage	\$54,936		\$63,606	
RESEARCH, TESTING, & MEDICAL LABORATORIES				
Establishments	64	105.1%	27,154	57.7%
Employment	515	70.6%	558,140	46.1%
Location Quotient	0.44		n/a	
Direct-Effect Employment Multiplier	1.85		3.30	
Total Employment Impact	954		1,853,127	
Average Annual Wage	\$54,079		\$80,785	
TOTAL BIOSCIENCES INDUSTRY				
Establishments	91	51.8%	47,593	28.3%
Employment	681	10.2%	1,420,324	15.8%
Location Quotient	0.23		n/a	
Direct-Effect Employment Multiplier	1.91		5.82	
Total Employment Impact	1,298		8,040,636	
Average Annual Wage	\$58,213		\$77,595	
TOTAL PRIVATE SECTOR				
Establishments	19,425	10.7%	8,860,956	13.8%
Employment	237,698	13.4%	113,917,377	3.5%
Average Annual Wage	\$45,092		\$45,229	

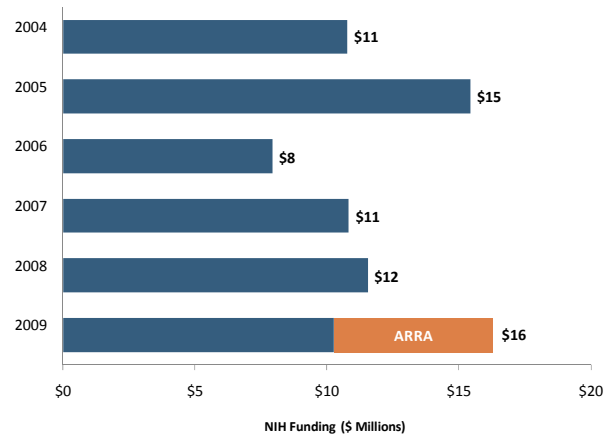
Note: U.S. employment metrics include Puerto Rico. Estimates of total employment impacts do not include Puerto Rico.

●●● Bioscience Performance Metrics

Bioscience Academic R&D Expenditures in Alaska, FY 2008

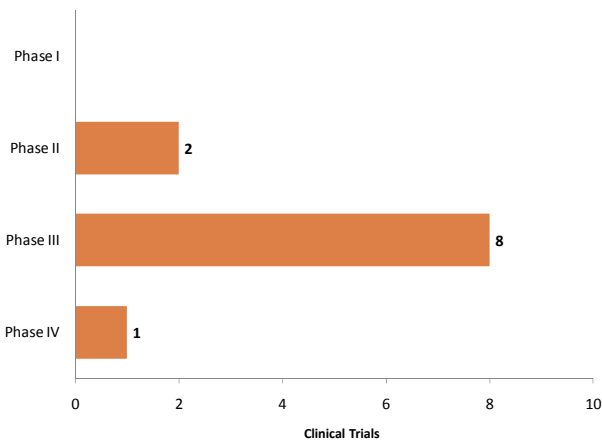


NIH Awards in Alaska, 2004–2009

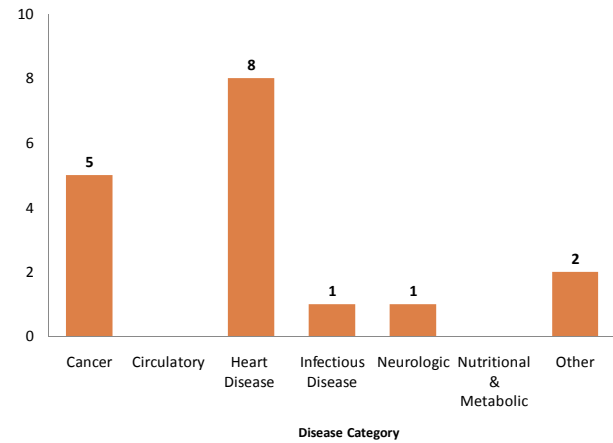


●●● Recent Clinical Trial Activities

Clinical Trials by Phase in Alaska, 2009

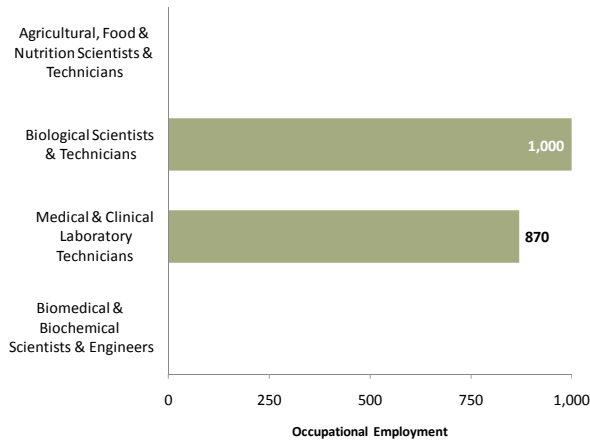


Clinical Trials by Major Disease Category in Alaska, 2009

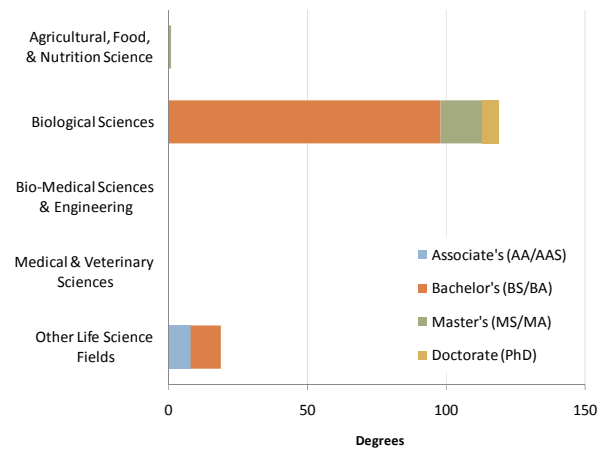


●●● Bioscience Talent Base

Bioscience-related Occupational Employment in Alaska, 2008

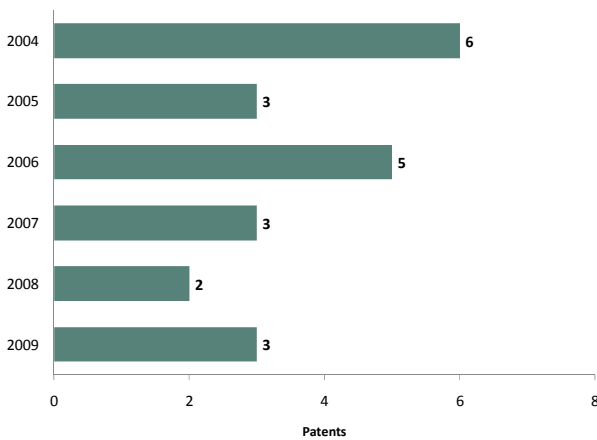


Bioscience-related Degrees in Alaska, AY 2008

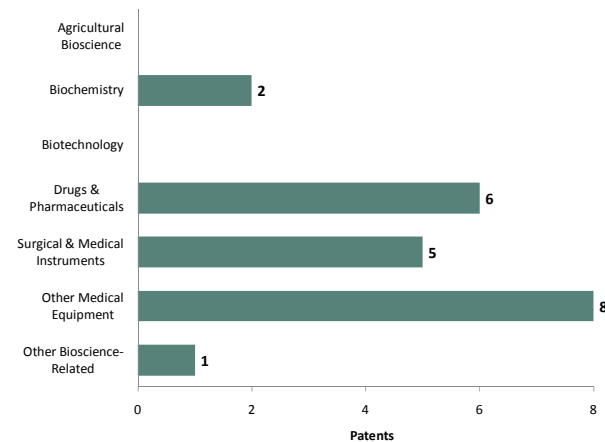


●●● Bioscience Patents

Bioscience-related Patents in Alaska, 2004–2009



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





State Bioscience Contact

No designated contact

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, 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