

ALASKA

The largest bioscience subsector in Alaska is research, testing, and medical laboratories (425 jobs); and this employment grew at more than twice the national rate during the 6 years ending in 2006. Academic research and development expenditures in the biosciences grew at a rate of 69 percent during the past 5 years, nearly twice the national growth rate. The State's 26 bioscience patents (2002–2007) were mainly in the categories of drugs and pharmaceuticals and other medical equipment.

Recent State Initiatives

The University of Alaska at Fairbanks (UAF) continues to build facilities to house its growing bioscience and biomedical programs. Construction of the **Biological Research and Diagnostics Facility**, the animal component of the Biological and Computational Sciences Facility, was completed in late 2006. The University has requested funding in FY 2009–FY 2010 to begin construction of **BIOS**, a 110,000-square-foot bioscience facility that would provide space for both research and teaching. Groundbreaking on the **Alaska State Public Health Virology Lab** occurred in 2007. Although this is a state-owned building, UAF will lease 5,000 square feet of space.

For additional information on Alaska's bioscience policies and programs, please see www.commerce.state.ak.us.

Bioscience Industry Base, 2006

Industry Subsector	Alaska		United States	
	2006	2001-06 Change	2006	2001-06 Change
Agricultural Feedstock & Chemicals				
Establishments	1	-90.8%	2,183	3.8%
Employment	188	-22.5%	105,846	-6.1%
Location Quotient	0.87		n.a.	
Direct-Effect Employment Multiplier	6.49		11.22	
Total Employment Impact	1,222		1,214,709	
Average Annual Wage	\$90,605		\$67,870	
Drugs & Pharmaceuticals				
Establishments	1	18.6%	2,654	1.9%
Employment	1	-72.0%	317,149	4.0%
Location Quotient	0.00		n.a.	
Direct-Effect Employment Multiplier	2.47		9.92	
Total Employment Impact	2		2,880,242	
Average Annual Wage	\$42,140		\$86,892	
Medical Devices & Equipment				
Establishments	21	23.5%	15,215	0.3%
Employment	72	2.2%	422,993	-0.9%
Location Quotient	0.08		n.a.	
Direct-Effect Employment Multiplier	1.73		4.85	
Total Employment Impact	124		1,980,128	
Average Annual Wage	\$39,732		\$59,441	
Research, Testing, & Medical Laboratories				
Establishments	56	78.4%	22,857	32.7%
Employment	425	40.8%	449,991	17.8%
Location Quotient	0.46		n.a.	
Direct-Effect Employment Multiplier	1.86		3.25	
Total Employment Impact	791		1,440,500	
Average Annual Wage	\$44,632		\$71,284	
Total Private Sector				
Establishments	19,020	8.4%	8,575,730	10.2%
Employment	231,524	10.4%	113,463,842	3.1%
Average Annual Wage	\$40,568		\$42,272	

Note: n.a. = metric is not applicable.

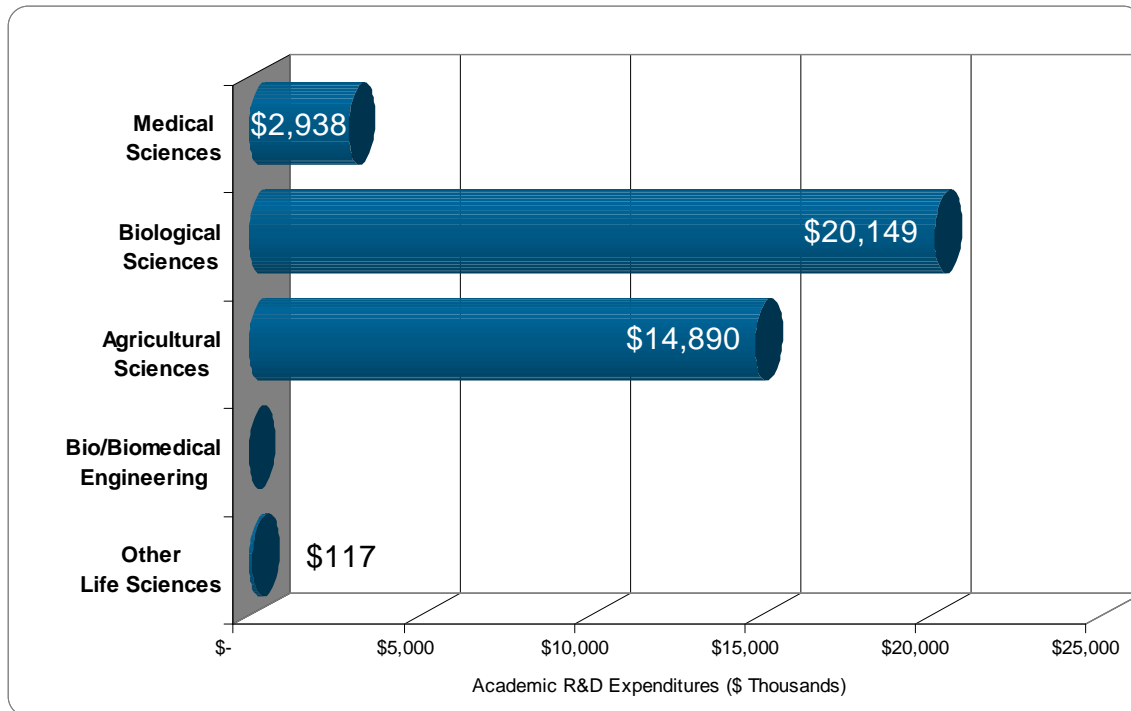
Additional Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

	Alaska	United States	Rank
Academic R&D Expenditures, FY 2006			
Total (\$ thousands)	\$163,034	\$47,760,402	43
Bioscience R&D (\$ thousands)	\$38,094	\$29,307,628	51
Bioscience Share of Total R&D	23.4%	61.4%	
Bioscience R&D Per Capita	\$56.23	\$98.10	
Change in Bioscience R&D FY 2002–2006	69.4%	36.9%	
NIH Funding, FY 2007			
Total (\$ thousands)	\$10,810	\$21,066,389	50
Per Capita Funding	\$15.82	\$69.84	
Change in Funding, FY 2002–2007	11.0%	11.2%	
Higher Education Degrees in Bioscience Fields, AY 2006	128	143,433	52
Employment in Bioscience-related Occupations, 2006	1,350	588,520	48
Bioscience Venture Capital Investments, 2002-2007 (\$ millions)	\$0.0	\$51,260.9	47
Bioscience and Related Patents, 2002-2007	26	121,817	52

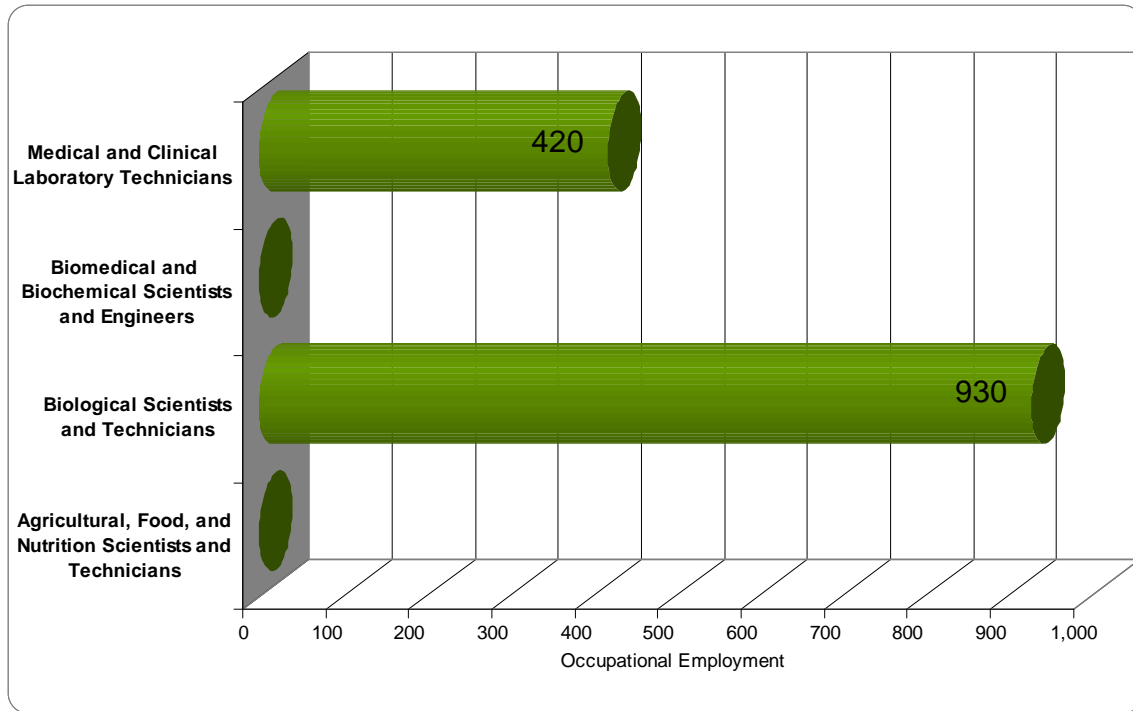
Bioscience R&D Base

Bioscience Academic R&D Expenditures in Alaska, FY 2006

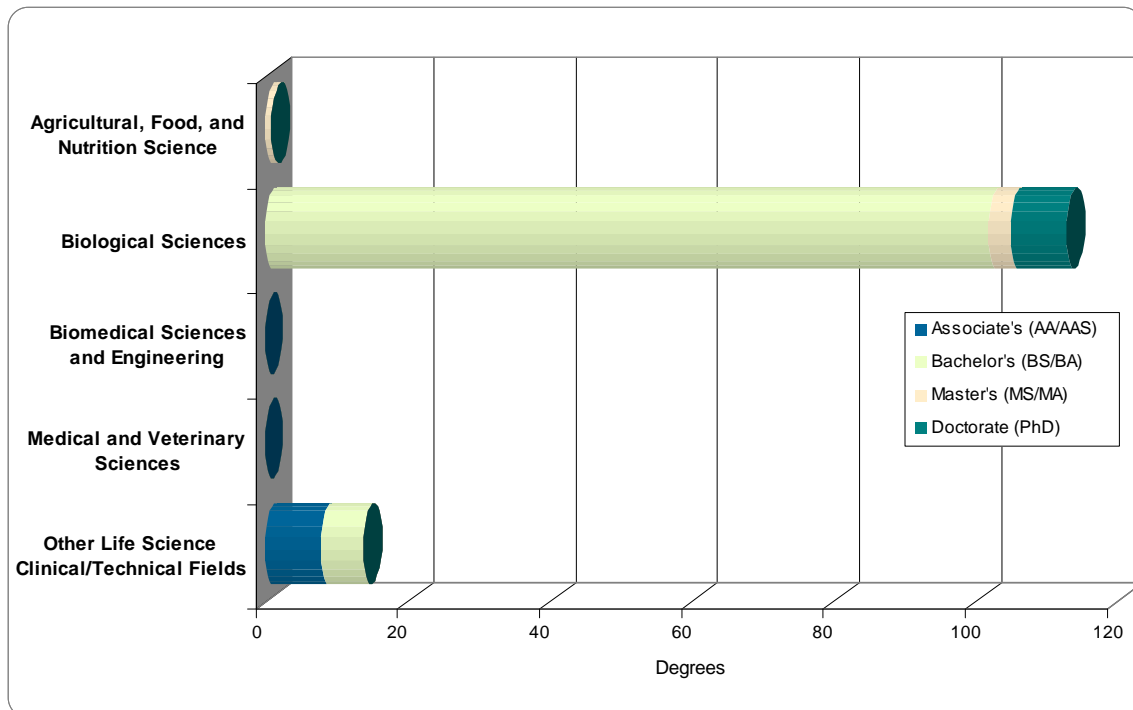


Bioscience Talent Base

Bioscience-related Occupational Employment in Alaska, 2006

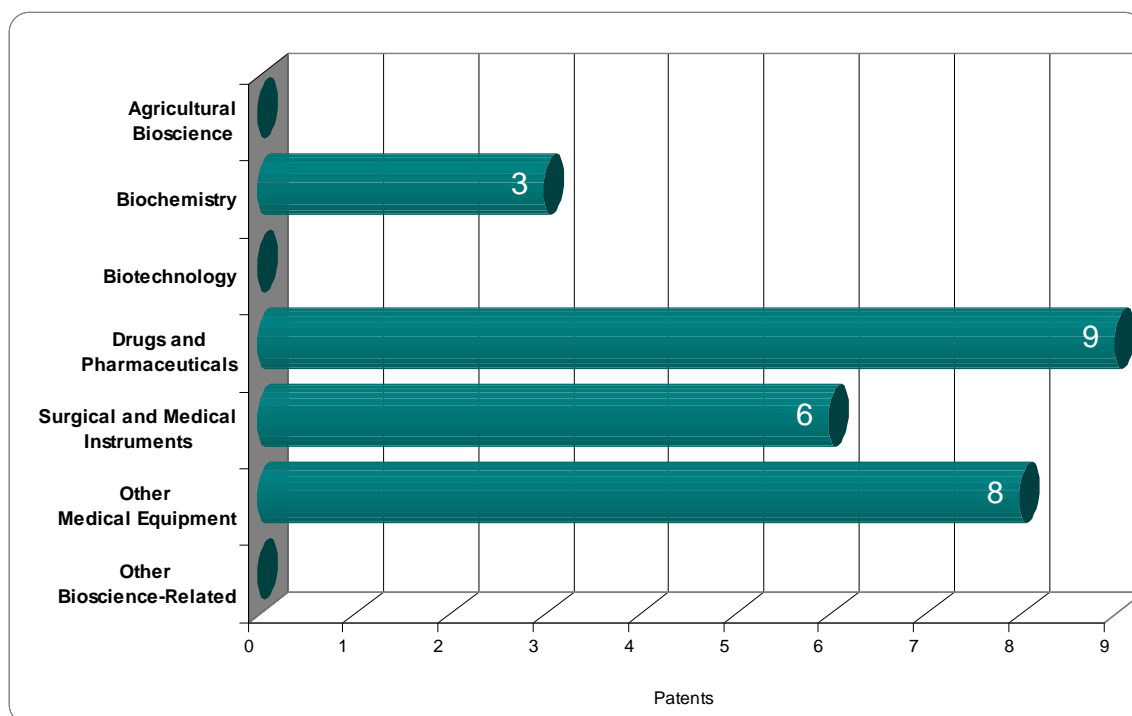


Bioscience-related Degrees in Alaska, AY 2006



Bioscience Patents

Bioscience-related Patents by Classification Group in Alaska, 2002–2007



State Bioscience Contacts

State Agency Contact:

Emil Notti
 Commissioner
 Alaska Department of Commerce, Community and
 Economic Development
 P.O. Box 110800
 Juneau, AL 99811-0800
 (907) 465-2500
 Emil_Notti@commerce.state.ak.us

State Bio Association Contact:

n/a

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 2006.

Employment Multipliers: U.S. Bureau of Economic Analysis RIMS II Employment Multipliers, 2005 (most currently available).

Academic R&D Expenditures: National Science Foundation (NSF) Survey of Research and Development Expenditures at Universities and Colleges, 2002 and 2006.

NIH Funding: National Institutes of Health – Office of Extramural Research, Award Trends – Dollars Awarded by State, 2002 and 2007.

Higher Education Degrees: National Center for Educational Statistics, Integrated Postsecondary Education Data System (IPEDS), 2006.

Occupational Employment: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (OES) survey data, 2006.

Venture Capital: Thomson Reuters VentureXpert Database, 2002-2007, as of May 1, 2008.

Patents: U.S. Patent & Trademark Office data as available from the Thomson Reuters' Delphion Patent Analysis Database, 2002–2007, as of May 1, 2008.

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