

NEVADA

The largest bioscience subsector in Nevada is research, testing, and medical laboratories (3,389 jobs), which has grown faster than the U.S. average since 2001 (up 29 percent). Academic bioscience research expenditures were \$58.9 million in 2006, half of which was in biological sciences. In the past 6 years, bioscience venture capital investments totaled \$73 million, mostly in medical/health products and medical/health information technology. Surgical and medical instruments were the largest share of the 211 bioscience patents issued in the same period.

Recent State Initiatives

Since the last BIO report, the State's bioscience industry and institutions created the **Nevada Biotechnology and Bioscience Consortium**. NevBio was formed in 2007 and joined BIO as an affiliate in early 2008.

For additional information on Nevada's bioscience policies and programs, please see <http://www.expand2Nevada.com/> and <http://www.nevbio.org>.

Major Industry Developments and Recent Successes

- Las Vegas-based **CardioVascular BioTherapeutics**, which is developing a protein formulation of human fibroblast growth factor, was approved to initiate a Phase II trial of angiogenesis therapy for severe coronary heart disease and completed its Phase I trial for wound healing.
- Reno-based **Sierra Sciences**, which is developing a medicine to activate expression of telomerase, filed patent applications on elements of transcriptional regulation of telomerase.
- Las Vegas-based **Phage Biotechnology** received its manufacturing license.

Bioscience Industry Base, 2006

Industry Subsector	Nevada		United States	
	2006	2001-06 Change	2006	2001-06 Change
Agricultural Feedstock & Chemicals				
Establishments	12	106.4%	2,183	3.8%
Employment	92	31.9%	105,846	-6.1%
Location Quotient	0.09		n.a.	
Direct-Effect Employment Multiplier	5.06		11.22	
Total Employment Impact	463		1,214,709	
Average Annual Wage	\$55,771		\$67,870	
Drugs & Pharmaceuticals				
Establishments	25	47.1%	2,654	1.9%
Employment	508	48.1%	317,149	4.0%
Location Quotient	0.16		n.a.	
Direct-Effect Employment Multiplier	3.13		9.92	
Total Employment Impact	1,591		2,880,242	
Average Annual Wage	\$42,285		\$86,892	
Medical Devices & Equipment				
Establishments	115	11.8%	15,215	0.3%
Employment	1,106	-26.7%	422,993	-0.9%
Location Quotient	0.26		n.a.	
Direct-Effect Employment Multiplier	2.10		4.85	
Total Employment Impact	2,327		1,980,128	
Average Annual Wage	\$41,559		\$59,441	
Research, Testing, & Medical Laboratories				
Establishments	225	56.0%	22,857	32.7%
Employment	3,389	29.3%	449,991	17.8%
Location Quotient	0.76		n.a.	
Direct-Effect Employment Multiplier	2.07		3.25	
Total Employment Impact	7,025		1,440,500	
Average Annual Wage	\$55,777		\$71,284	
Total Private Sector				
Establishments	70,568	42.0%	8,575,730	10.2%
Employment	1,125,150	22.2%	113,463,842	3.1%
Average Annual Wage	\$39,075		\$42,272	

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

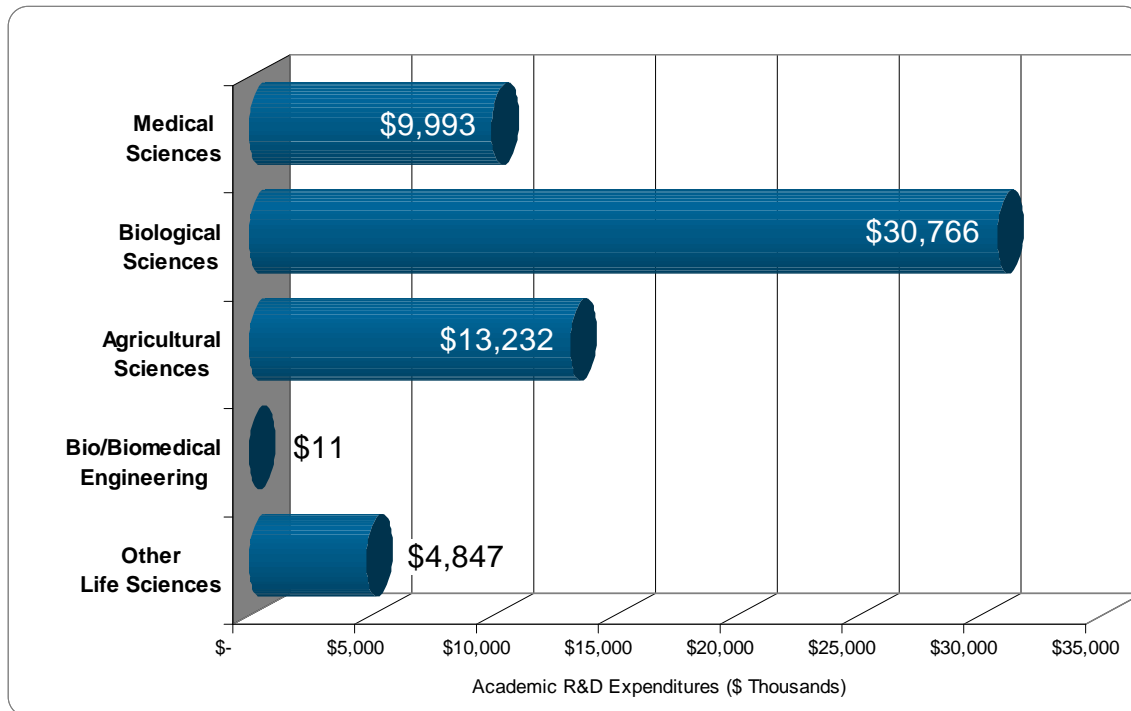
Additional Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

	Nevada	United States	Rank
Academic R&D Expenditures, FY 2006			
Total (\$ thousands)	\$194,459	\$47,760,402	41
Bioscience R&D (\$ thousands)	\$58,849	\$29,307,628	47
Bioscience Share of Total R&D	30.3%	61.4%	
Bioscience R&D Per Capita	\$23.61	\$98.10	
Change in Bioscience R&D FY 2002–2006	55.1%	36.9%	
NIH Funding, FY 2007			
Total (\$ thousands)	\$22,004	\$21,066,389	47
Per Capita Funding	\$8.58	\$69.84	
Change in Funding, FY 2002–2007	18.5%	11.2%	
Higher Education Degrees in Bioscience Fields, AY 2006	498	143,433	46
Employment in Bioscience-related Occupations, 2006	2,280	588,520	42
Bioscience Venture Capital Investments, 2002-2007 (\$ millions)	\$73.4	\$51,260.9	33
Bioscience and Related Patents, 2002-2007	211	121,817	44

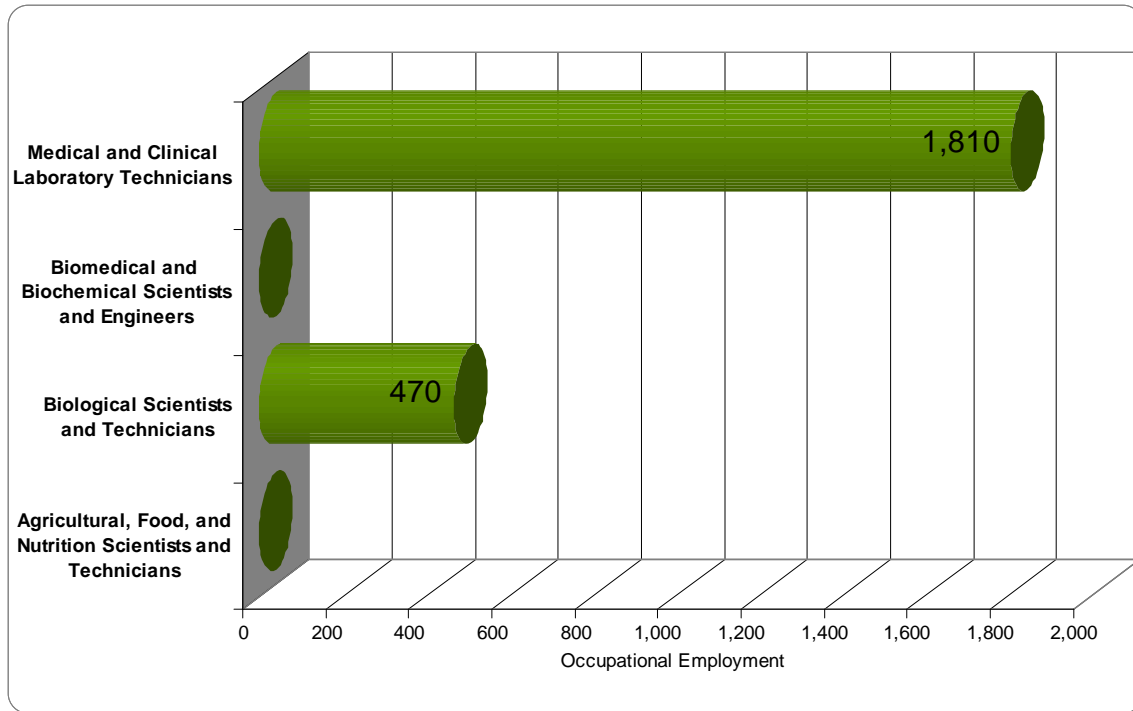
Bioscience R&D Base

Bioscience Academic R&D Expenditures in Nevada, FY 2006

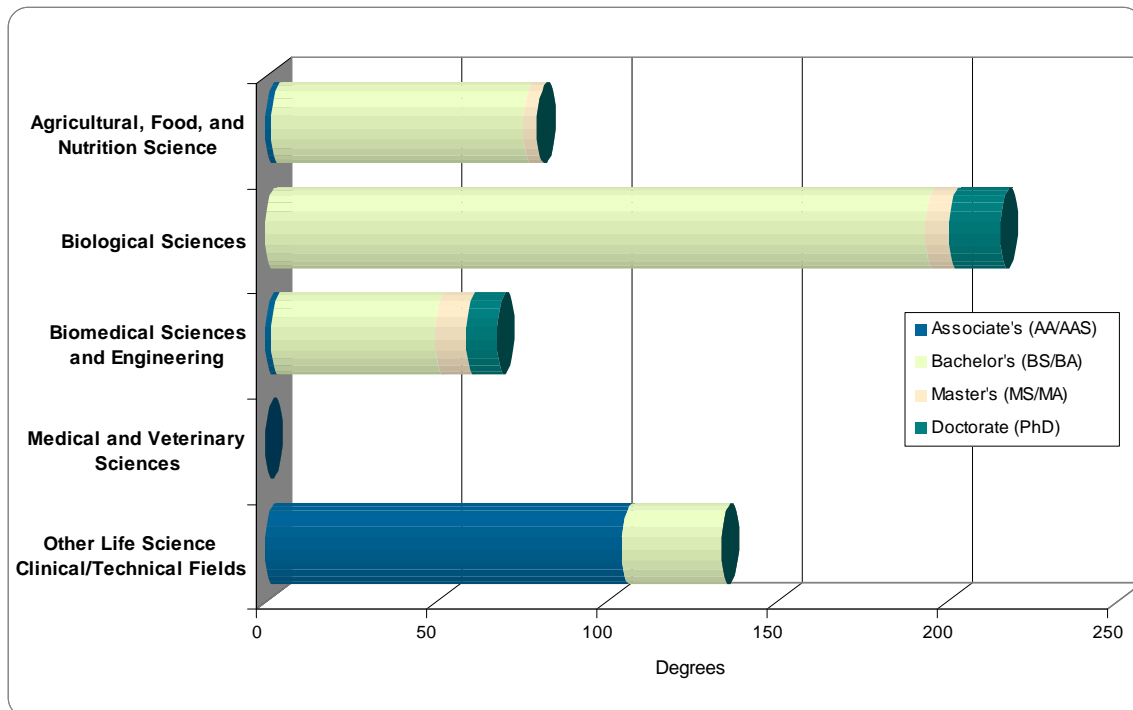


Bioscience Talent Base

Bioscience-related Occupational Employment in Nevada, 2006

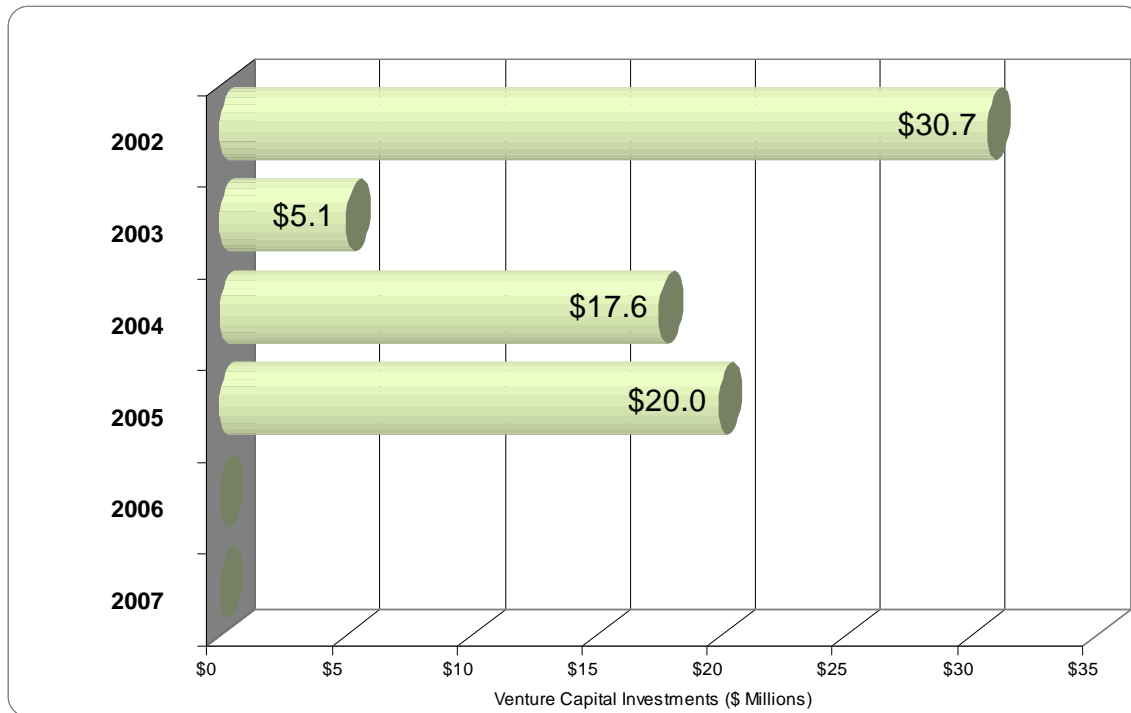


Bioscience-related Degrees in Nevada, AY 2006

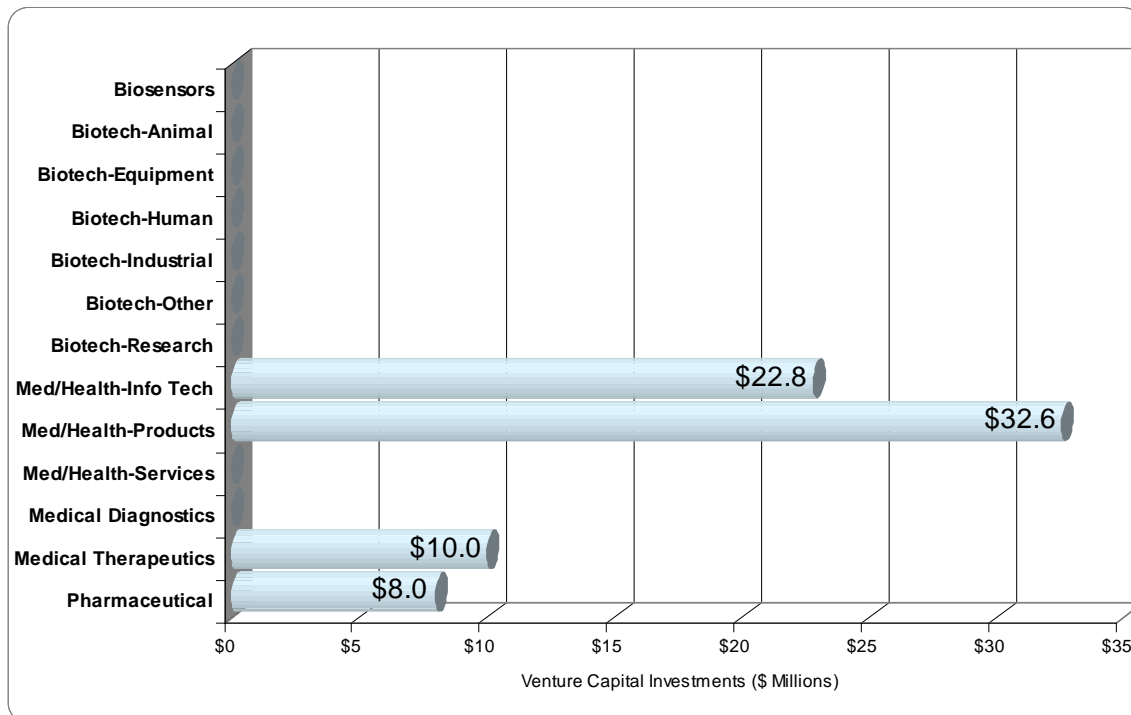


Bioscience Venture Capital

Bioscience-related Venture Capital Investments in Nevada, 2002–2007

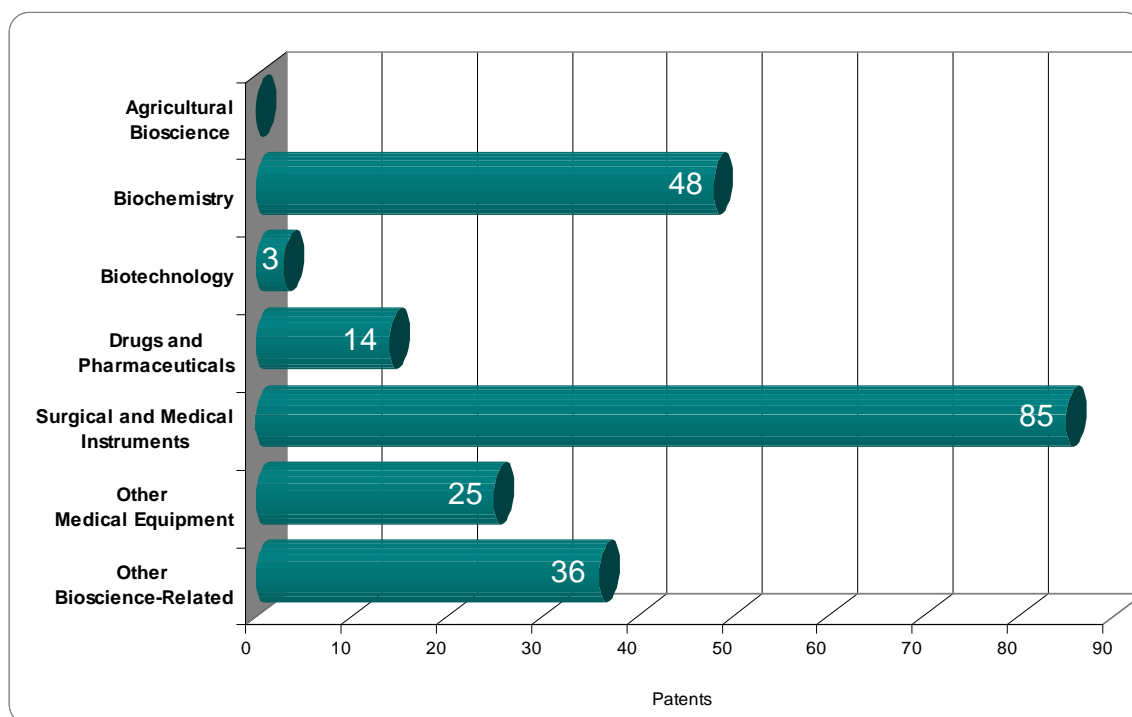


Bioscience-related Venture Capital Investments in Nevada by Segment, 2002–2007



Bioscience Patents

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



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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 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.