

## NEW JERSEY

New Jersey has more than 10 percent of the national employment base in drugs and pharmaceuticals, and more than 5 percent in both the research, testing, and medical laboratories and the medical devices and equipment subsectors. All four bioscience subsectors represent an employment specialization or high concentration, with a particularly high location quotient (4.32) in drugs and pharmaceuticals. In both bioscience venture capital invested and patents issued in the past 6 years, the State places in the top four. Of the \$2.78 billion in venture capital invested in the biosciences in the past 6 years, half went to the pharmaceutical sector and another quarter to human biotechnology. Drugs and pharmaceuticals was the largest category, with nearly half of the 6,012 patents issued.

### Major Industry Developments and Recent Successes

- **Celgene Corporation**, based in Summit, acquired Pharmion Corporation for \$2.9 billion in November 2007, adding Vidaza and other drugs to its hematology/oncology line.
- **Novo Nordisk**, headquartered in Princeton, opened a hemostasis research facility in 2006 at the New Jersey Economic Development Authority's Technology Centre of New Jersey, in the Greater New Brunswick Innovation Zone.
- **Amicus Therapeutics**, a Cranbury-based developer of pharmacological chaperones for treatment of genetic disease, announced a successful initial public offering in May 2007.

### Recent State Initiatives

Under Governor Jon Corzine's Economic Growth Strategy of 2006, New Jersey has integrated many financing and incentive programs relevant to bioscience companies into a comprehensive **Edison Innovation Fund** managed by the New Jersey Economic Development Authority (NJEDA), the New Jersey Commission on Science and Technology, and other agencies. Under this initiative, assistance is specially targeted to firms in three **Innovation Zones**, each surrounding one or more of the State's research universities.

In January 2008, NJEDA finalized investment in NewSpring Health Capital II, the latest in a series of investments in bioscience venture-capital funds that will be active in-state. NJEDA also administers a recently expanded **Tax Credit Transfer** program; an **Angel Guarantee Fund**; and several equity-like and near-equity financing programs.

Stem cell research funded by the New Jersey Commission on Science and Technology has also risen from \$5 million to \$10 million; and, in October 2007, the State broke ground for a new \$150 million **Stem Cell Institute of New Jersey** in New Brunswick.

In fall 2007, NJEDA authorized \$11 million for construction of an additional 38,000 square feet of generic wet-lab space in the **Technology Centre of New Jersey**, a research park and incubator complex developed by NJEDA in North Brunswick. This doubles the amount of wet-lab space on-site.

With support from NJEDA, BioNJ has launched a **Life Sciences Seed Syndicate**, a networking event linking angel investors to opportunities emerging from the State's research universities. The State is now the site for three U.S. Department of Labor WIRED (Workforce Innovation in Regional Economic Development) training grants, each with some degree of bioscience focus, and one directly involving BioNJ. The Commission on Science and Technology continued its **Technology Fellowship** program that places doctoral-degree graduates with small companies.

For additional information on New Jersey's bioscience policies and programs, please see <http://www.newjerseybusiness.gov> and <http://www.BioNJ.org>.

## Bioscience Industry Base, 2006

Industry Subsector	New Jersey		United States	
	2006	2001-06 Change	2006	2001-06 Change
<b>Agricultural Feedstock &amp; Chemicals</b>				
Establishments	58	-2.4%	2,183	3.8%
Employment	3,587	27.8%	105,846	-6.1%
Location Quotient	1.15		n.a.	
Direct-Effect Employment Multiplier	8.20		11.22	
Total Employment Impact	29,422		1,214,709	
Average Annual Wage	\$85,020		\$67,870	
<b>Drugs &amp; Pharmaceuticals</b>				
Establishments	248	22.2%	2,654	1.9%
Employment	40,379	6.4%	317,149	4.0%
Location Quotient	4.32		n.a.	
Direct-Effect Employment Multiplier	6.85		9.92	
Total Employment Impact	276,435		2,880,242	
Average Annual Wage	\$116,536		\$86,892	
<b>Medical Devices &amp; Equipment</b>				
Establishments	537	5.5%	15,215	0.3%
Employment	14,833	-5.3%	422,993	-0.9%
Location Quotient	1.19		n.a.	
Direct-Effect Employment Multiplier	3.19		4.85	
Total Employment Impact	47,364		1,980,128	
Average Annual Wage	\$74,922		\$59,441	
<b>Research, Testing, &amp; Medical Laboratories</b>				
Establishments	925	31.4%	22,857	32.7%
Employment	24,880	1.3%	449,991	17.8%
Location Quotient	1.88		n.a.	
Direct-Effect Employment Multiplier	2.45		3.25	
Total Employment Impact	61,069		1,440,500	
Average Annual Wage	\$94,791		\$71,284	
<b>Total Private Sector</b>				
Establishments	273,437	8.6%	8,575,730	10.2%
Employment	3,341,795	1.1%	113,463,842	3.1%
Average Annual Wage	\$51,367		\$42,272	

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

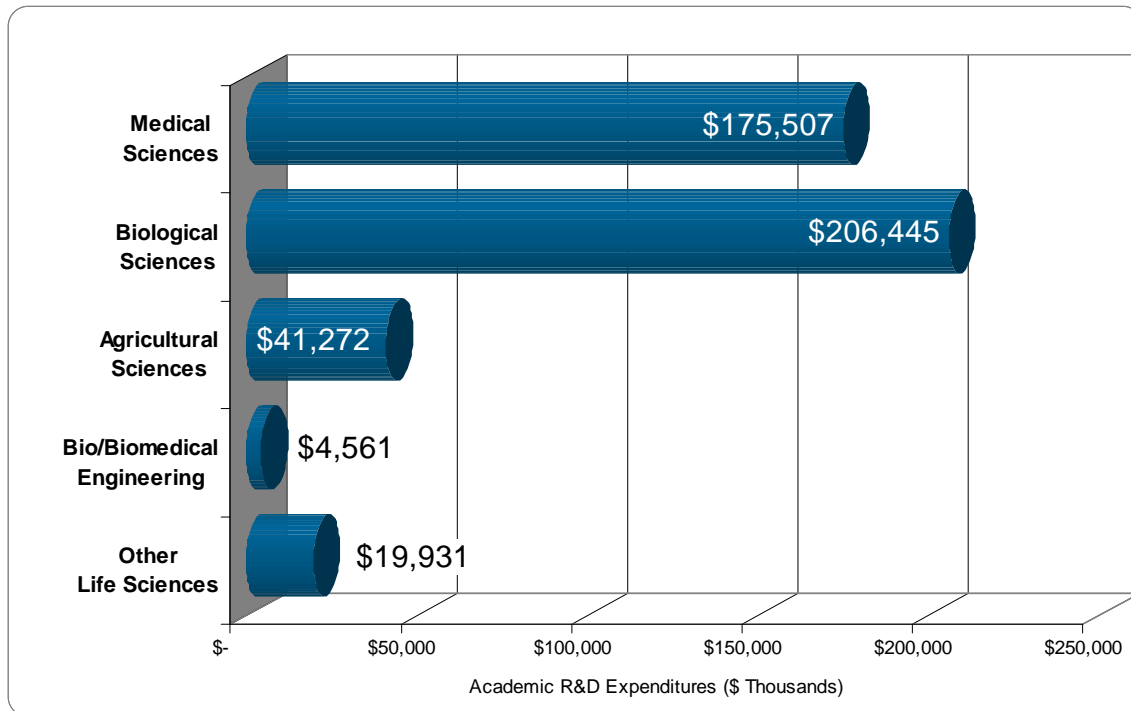
## Additional Bioscience Performance Metrics

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

	New Jersey	United States	Rank
Academic R&D Expenditures, FY 2006			
Total (\$ thousands)	\$858,413	\$47,760,402	17
Bioscience R&D (\$ thousands)	\$447,716	\$29,307,628	19
Bioscience Share of Total R&D	52.2%	61.4%	
Bioscience R&D Per Capita	\$51.66	\$98.10	
Change in Bioscience R&D FY 2002–2006	36.7%	36.9%	
NIH Funding, FY 2007			
Total (\$ thousands)	\$253,608	\$21,066,389	22
Per Capita Funding	\$29.20	\$69.84	
Change in Funding, FY 2002–2007	17.8%	11.2%	
Higher Education Degrees in Bioscience Fields, AY 2006	2,835	143,433	16
Employment in Bioscience-related Occupations, 2006	18,580	588,520	8
Bioscience Venture Capital Investments, 2002-2007 (\$ millions)	\$2,778.3	\$51,260.9	3
Bioscience and Related Patents, 2002-2007	6,012	121,817	4

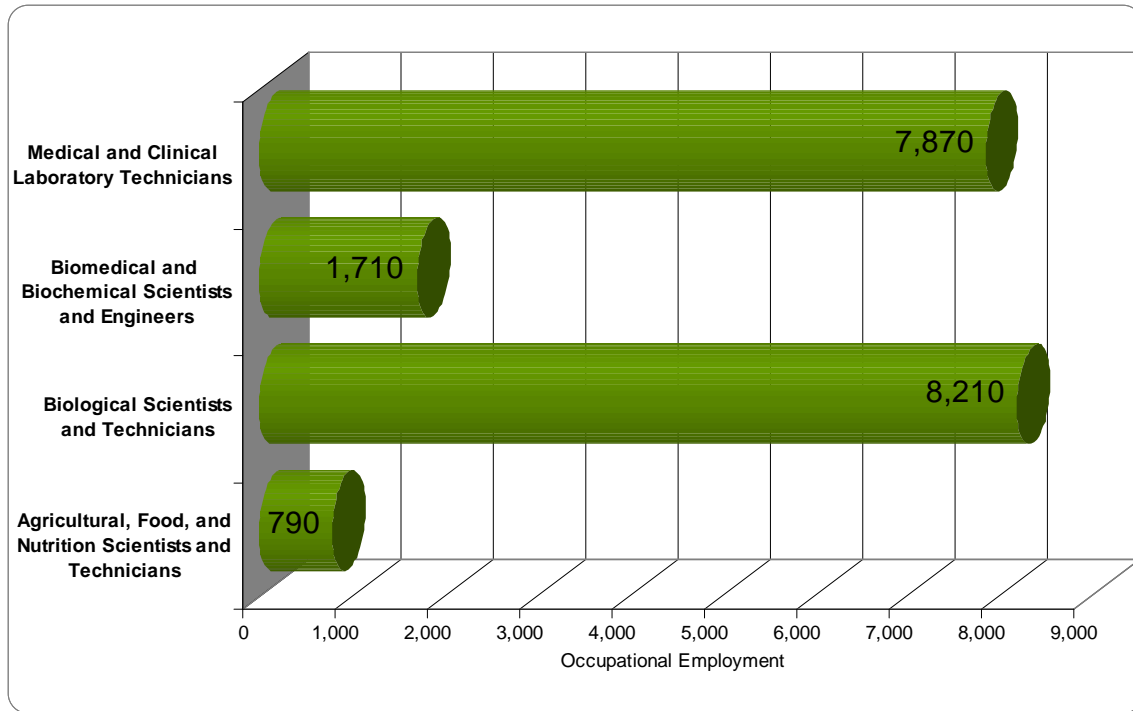
## Bioscience R&D Base

### Bioscience Academic R&D Expenditures in New Jersey, FY 2006

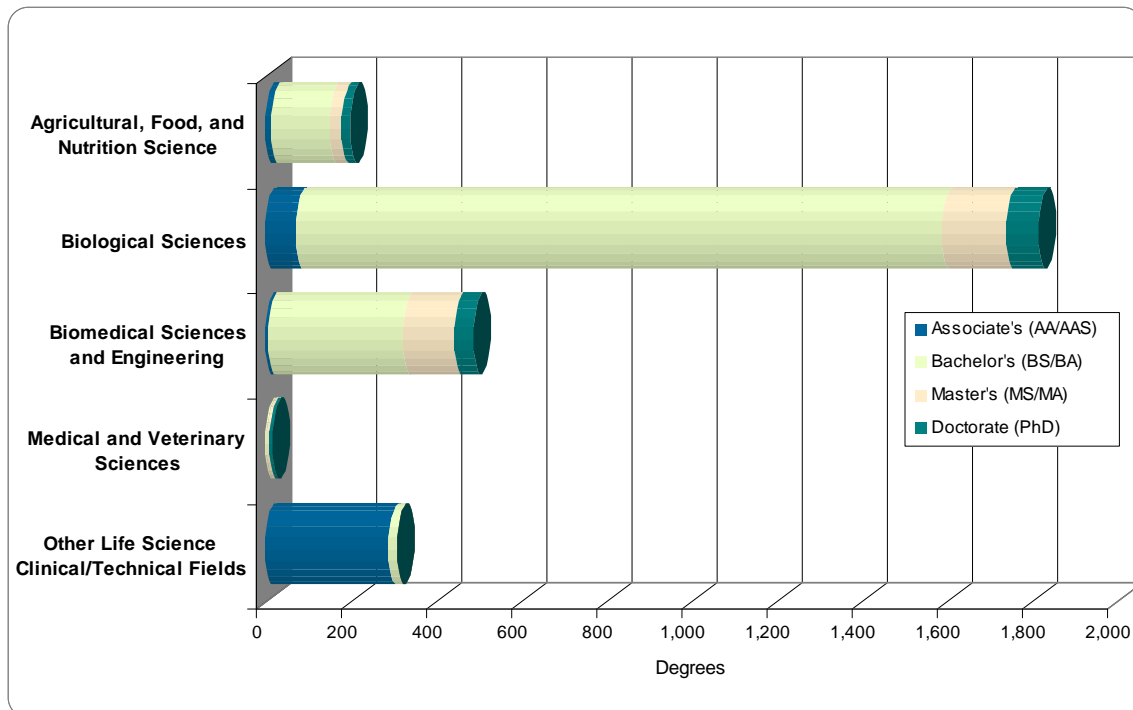


## Bioscience Talent Base

### Bioscience-related Occupational Employment in New Jersey, 2006

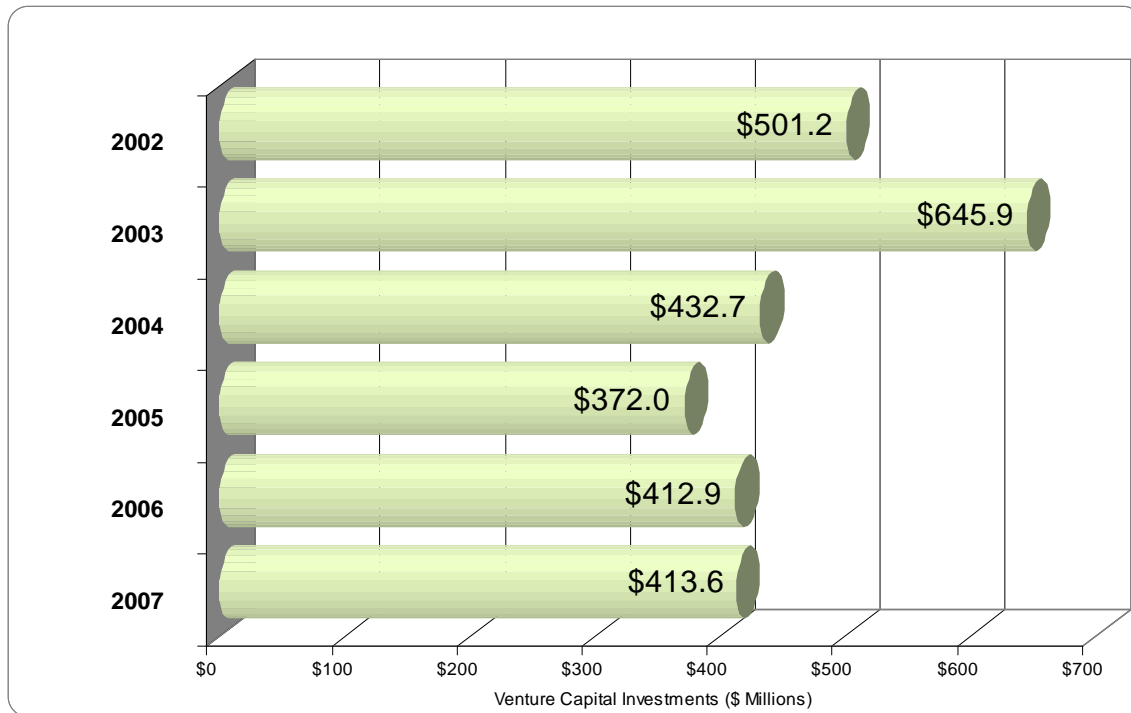


### Bioscience-related Degrees in New Jersey, AY 2006

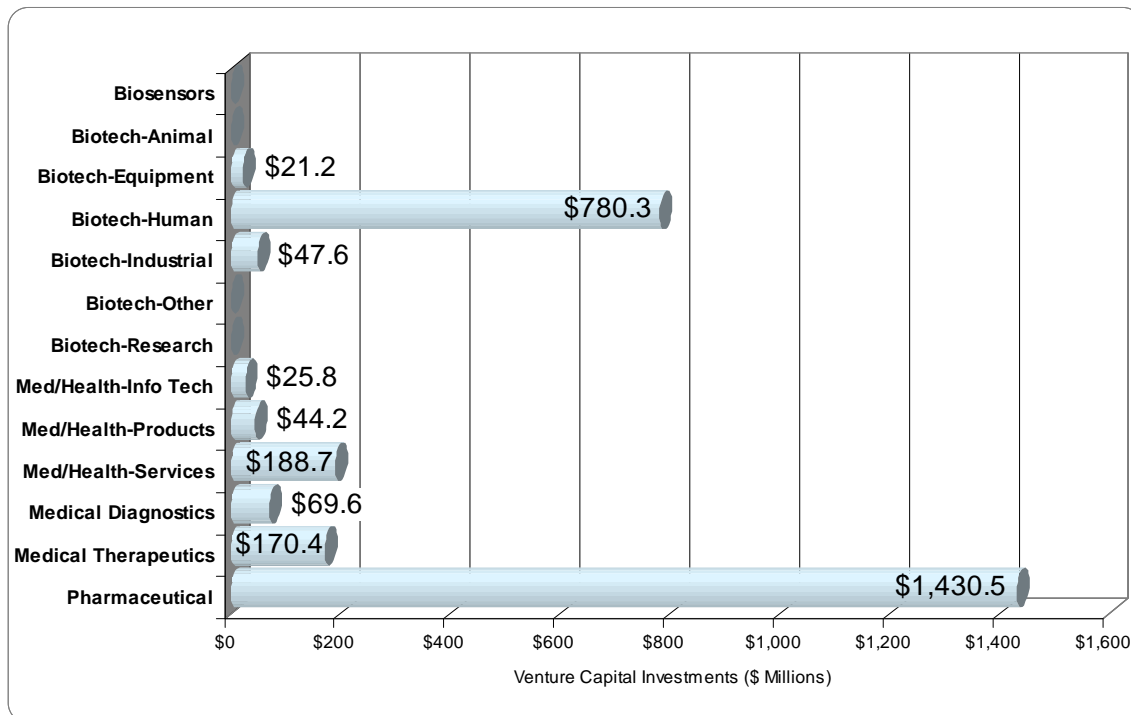


## Bioscience Venture Capital

Bioscience-related Venture Capital Investments in New Jersey, 2002–2007

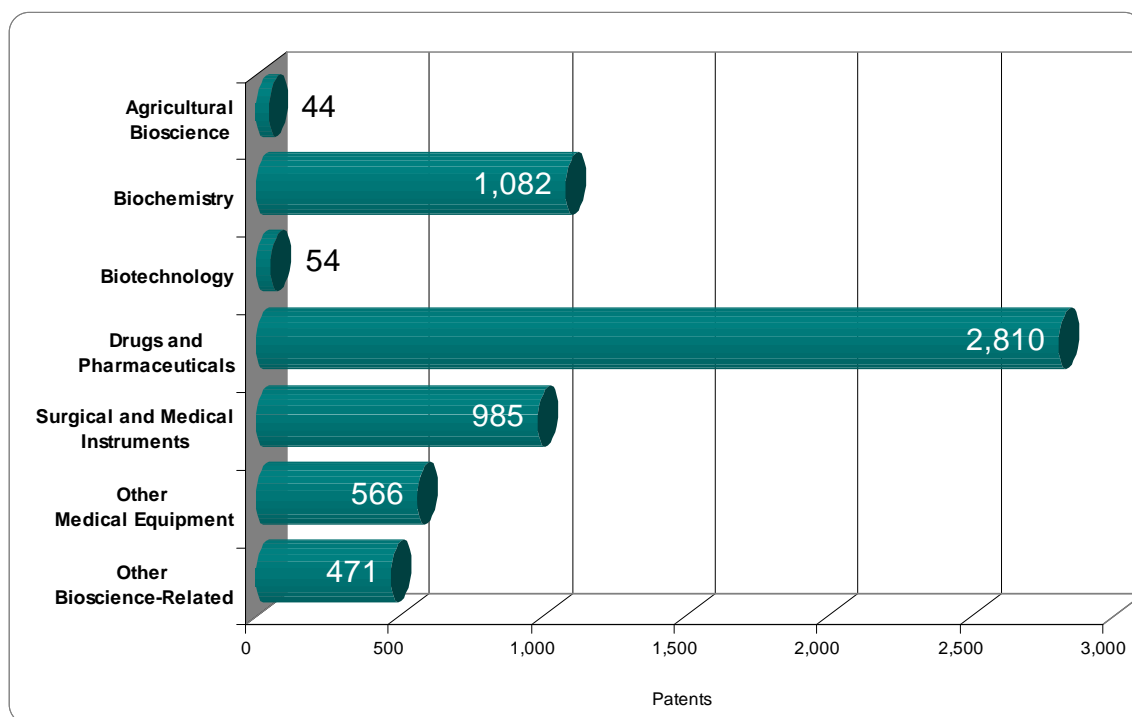


Bioscience-related Venture Capital Investments in New Jersey by Segment, 2002–2007



## Bioscience Patents

### Bioscience-related Patents by Classification Group in New Jersey, 2002–2007



## 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 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.