

INDIANA

Indiana has more than 5 percent of national employment and a strong specialization (location quotient of 2.76) in the drugs and pharmaceuticals subsector, and additional specializations in agricultural feedstock and chemicals (2.07) and medical devices and equipment (1.94). Academic bioscience research expenditures totaled \$430 million in 2006, with at least \$100 million each in medical, biological, and agricultural sciences. Funding over the past 6 years from the National Institutes of Health grew at 21 percent, nearly twice the national rate. Pharmaceuticals and medical/health services represented the largest share of the \$200 million in bioscience venture capital invested during the past 6 years. Of 2,016 patents granted in the same period, the dominant share was in drugs and pharmaceuticals.

Major Industry Developments and Recent Successes

- **Medco** broke ground in 2007 for a \$140 million facility in central Indiana that will be the world's largest, most advanced automated pharmacy.
- **Cook Pharmacia** opened a new biopharmaceutical manufacturing facility in Bloomington.
- **Datalys Center**, a new national center focusing on treatment and prevention of sports and exercise injuries, has been formed in Indianapolis by the National Collegiate Athletic Association, BioCrossroads, and the American College of Sports Medicine.

Recent State Initiatives

Activity continued in several programs established under the **Life Sciences Initiative** adopted in 2005. The \$6 million **Indiana Seed Fund** administered by BioCrossroads continued to make seed-stage investments (\$50,000 to \$500,000) in bioscience start-ups. The **Indiana 21st Century Research and Technology Fund** administered by the Indiana Economic Development Corporation (IEDC) invested \$30 million during 2007 in both entrepreneurial companies and university-based projects with commercial partners, many in the life sciences. IEDC also continued disbursements from its \$20 million **Life Sciences R&D Growth Fund** supporting universities for recruitment of Eminent Scholars. A partial exemption for patent-derived income and an increased R&D tax credit also took effect in 2007.

Indiana University's Kelley School of Business established a **Healthcare and Life Sciences Initiative**, including a center that supports fellowships, student activities, and integration of life science content into the MBA curriculum.

For additional information on Indiana's bioscience policies and programs, please see <http://www.in.gov/iedc/>, <http://www.ihif.org>, and <http://www.biocrossroads.com/>.

Bioscience Industry Base, 2006

Industry Subsector	Indiana		United States	
	2006	2001-06 Change	2006	2001-06 Change
Agricultural Feedstock & Chemicals				
Establishments	37	10.5%	2,183	3.8%
Employment	4,805	-9.2%	105,846	-6.1%
Location Quotient	2.07		n.a.	
Direct-Effect Employment Multiplier	6.95		11.22	
Total Employment Impact	33,395		1,214,709	
Average Annual Wage	\$72,845		\$67,870	
Drugs & Pharmaceuticals				
Establishments	39	-4.9%	2,654	1.9%
Employment	19,255	3.9%	317,149	4.0%
Location Quotient	2.76		n.a.	
Direct-Effect Employment Multiplier	6.66		9.92	
Total Employment Impact	128,298		2,880,242	
Average Annual Wage	\$100,173		\$86,892	
Medical Devices & Equipment				
Establishments	287	-0.3%	15,215	0.3%
Employment	18,023	22.8%	422,993	-0.9%
Location Quotient	1.94		n.a.	
Direct-Effect Employment Multiplier	3.30		4.85	
Total Employment Impact	59,408		1,980,128	
Average Annual Wage	\$59,166		\$59,441	
Research, Testing, & Medical Laboratories				
Establishments	357	32.8%	22,857	32.7%
Employment	7,164	8.7%	449,991	17.8%
Location Quotient	0.72		n.a.	
Direct-Effect Employment Multiplier	2.28		3.25	
Total Employment Impact	16,368		1,440,500	
Average Annual Wage	\$53,146		\$71,284	
Total Private Sector				
Establishments	150,419	2.9%	8,575,730	10.2%
Employment	2,494,139	0.3%	113,463,842	3.1%
Average Annual Wage	\$36,610		\$42,272	

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

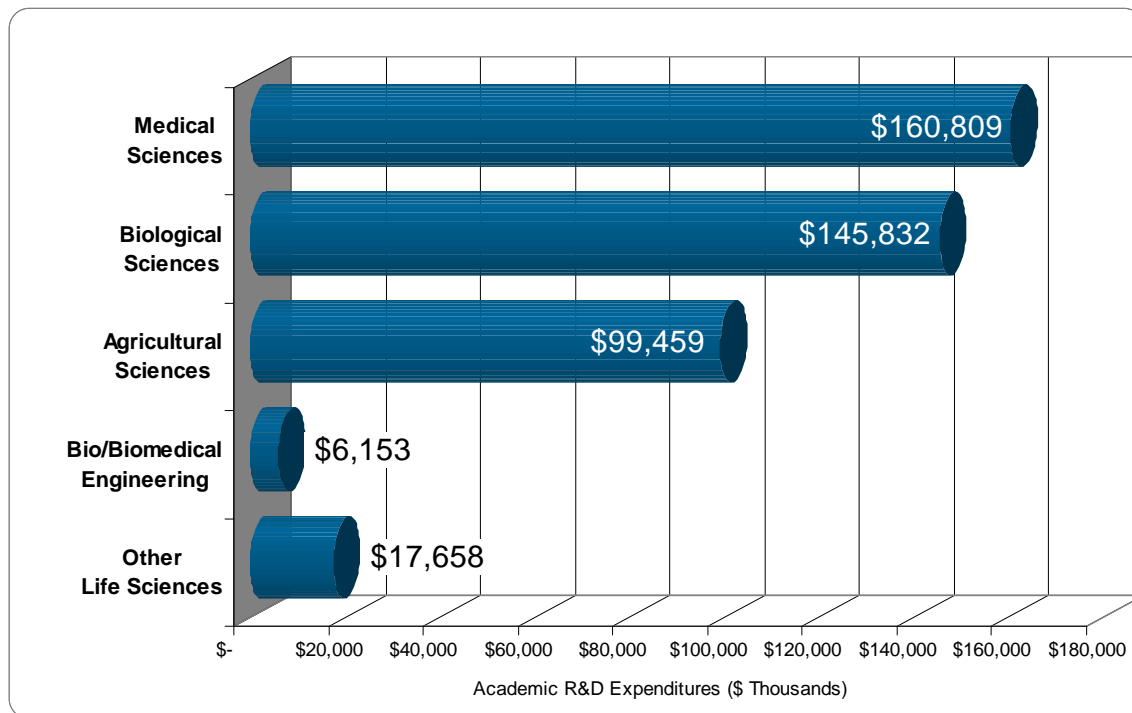
Additional Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

	Indiana	United States	Rank
Academic R&D Expenditures, FY 2006			
Total (\$ thousands)	\$823,286	\$47,760,402	18
Bioscience R&D (\$ thousands)	\$429,911	\$29,307,628	22
Bioscience Share of Total R&D	52.2%	61.4%	
Bioscience R&D Per Capita	\$68.21	\$98.10	
Change in Bioscience R&D FY 2002–2006	34.5%	36.9%	
NIH Funding, FY 2007			
Total (\$ thousands)	\$207,952	\$21,066,389	24
Per Capita Funding	\$32.77	\$69.84	
Change in Funding, FY 2002–2007	20.7%	11.2%	
Higher Education Degrees in Bioscience Fields, AY 2006	2,623	143,433	18
Employment in Bioscience-related Occupations, 2006	11,750	588,520	17
Bioscience Venture Capital Investments, 2002-2007 (\$ millions)	\$200.3	\$51,260.9	25
Bioscience and Related Patents, 2002-2007	2,016	121,817	24

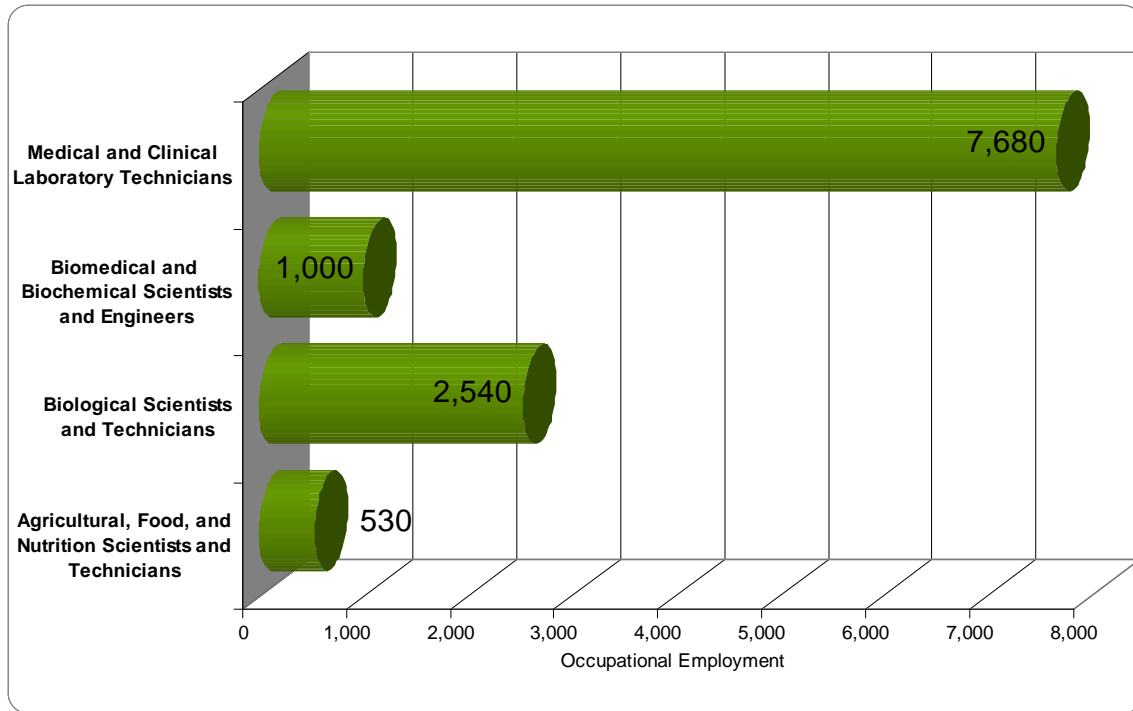
Bioscience R&D Base

Bioscience Academic R&D Expenditures in Indiana, FY 2006

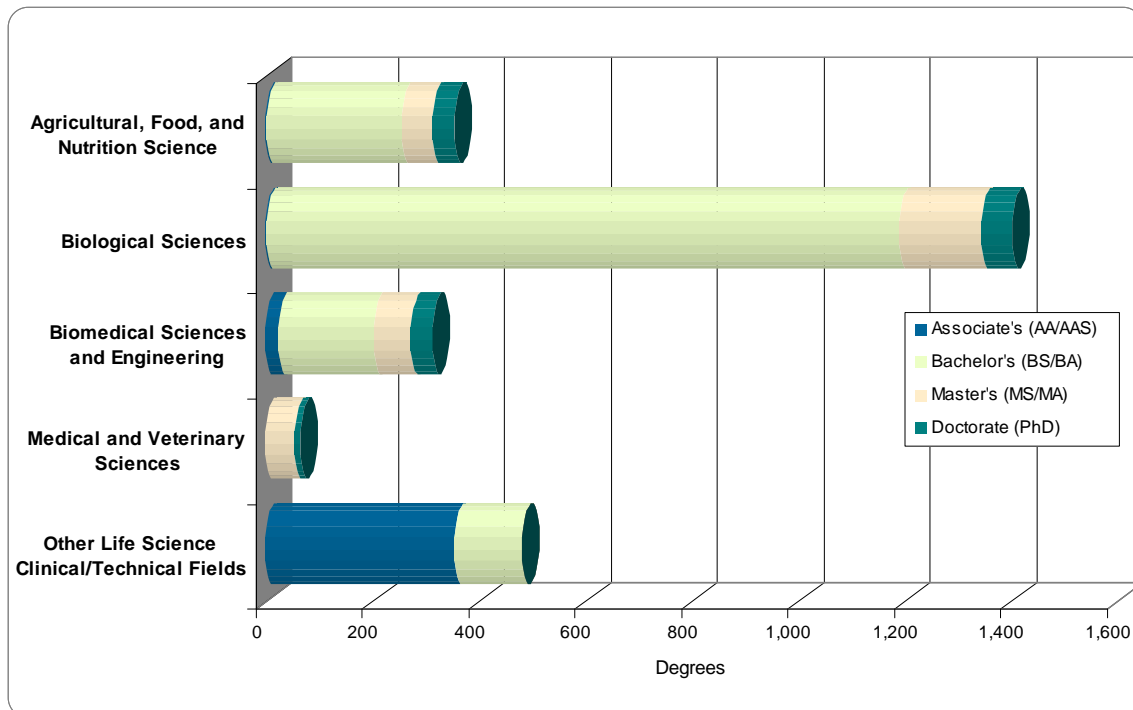


Bioscience Talent Base

Bioscience-related Occupational Employment in Indiana, 2006

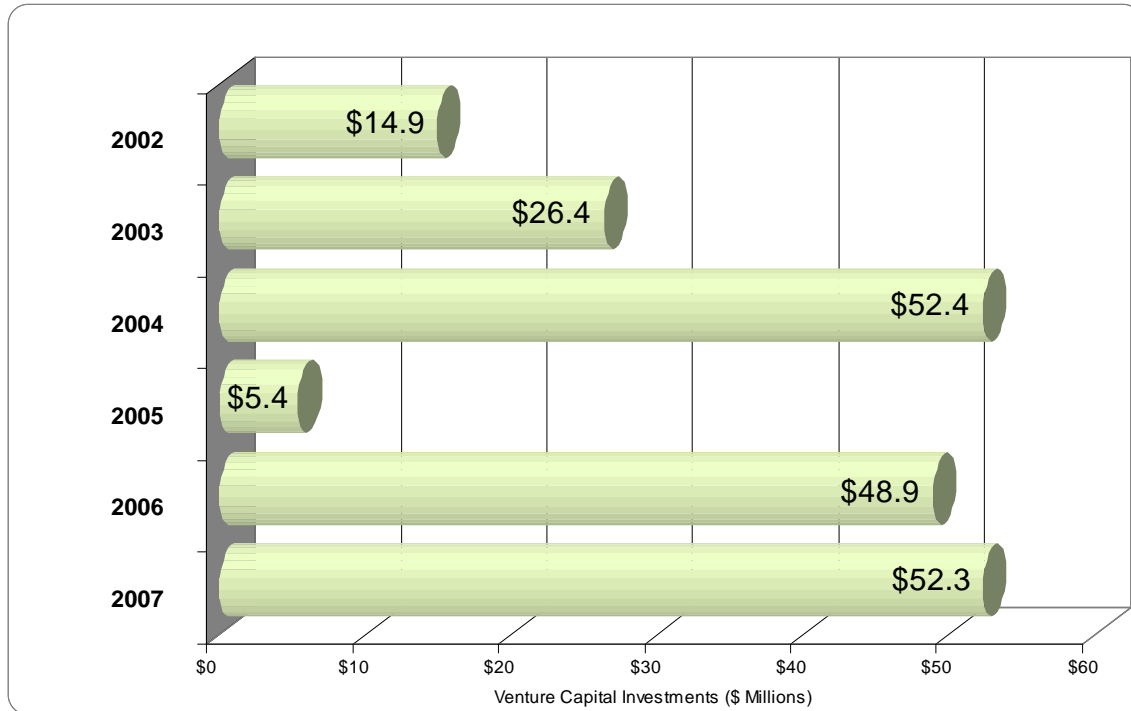


Bioscience-related Degrees in Indiana, AY 2006

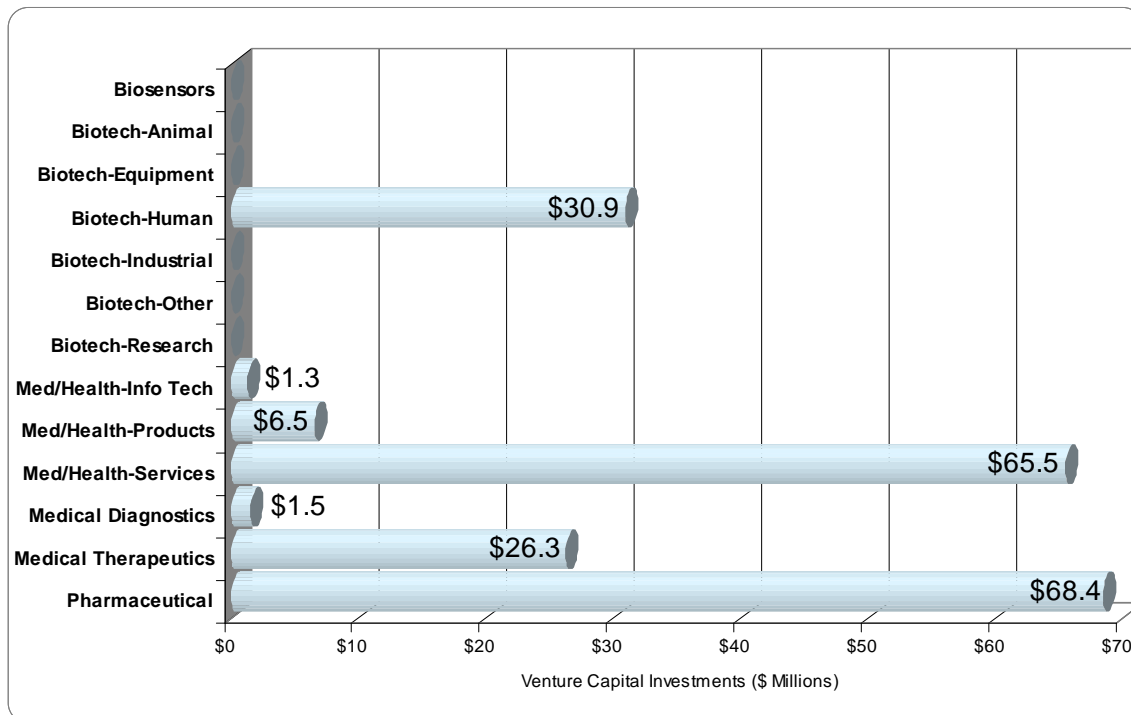


Bioscience Venture Capital

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

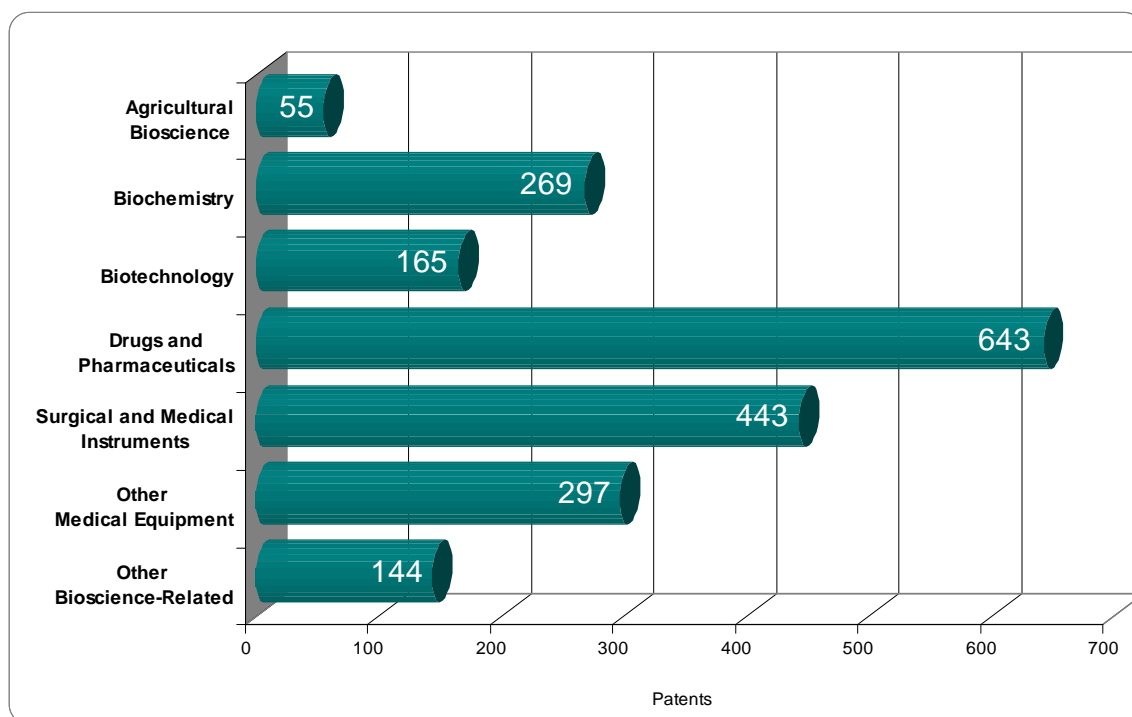


Bioscience-related Venture Capital Investments in Indiana by Segment, 2002–2007



Bioscience Patents

Bioscience-related Patents by Classification Group in Indiana, 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.