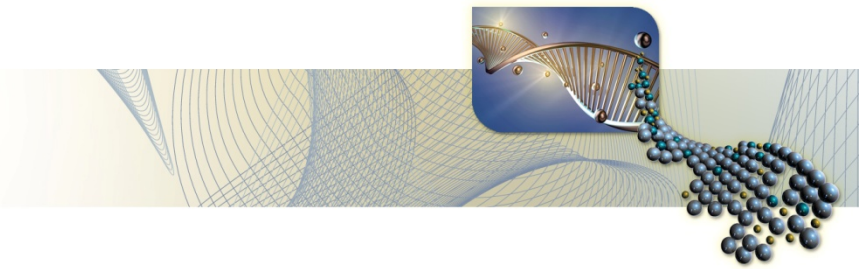


OHIO



Ohio has a large and specialized employment base in the agricultural feedstock and chemicals subsector of the bioscience industry (location quotient of 1.51). The State's research, testing and medical laboratories subsector and its medical device and equipment subsector have grown faster than the national rate since 2001. Academic bioscience research and development expenditures in 2008 totaled \$1.16 billion, with a strong focus in the medical sciences (\$739 million). Growth in academic R&D in the biosciences in Ohio has outpaced that for the nation since 2004. The State plays an important role in clinical trials with its biomedical institutions participating in 735 active trials in 2009. During the last six years, a total of \$626 million in venture capital was invested in Ohio bioscience companies. The largest VC investments went to the medical diagnostics and medical therapeutics sectors. Surgical and medical instruments dominated the 2,405 bioscience patents issued to Ohio inventors during the same six-year period.

●●● Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metrics	Ohio	United States	Rank*
Bioscience Industry, 2008			
Total Bioscience Industry Employment, 2008	36,450	1,420,324	II
Bioscience Industry Location Quotient, 2008	0.65	n/a	IV
Biosciences Industry Establishments, 2008	1,624	47,593	I
Academic R&D Expenditures, FY 2008			
Bioscience R&D (\$ thousands)	\$1,162,471	\$31,818,810	9
Bioscience Share of Total R&D	63.6%	61.3%	21
Bioscience R&D Per Capita	\$100.84	\$104.54	21
Change in Bioscience R&D, FY 2004–08	46.7%	22.3%	4
NIH Funding, FY 2009			
Total, Including ARRA Funds (\$ thousands)	\$768,868	\$25,837,590	10
Per Capita Funding	\$66.61	\$84.16	22
Change in Baseline Funding, FY 2004–09**	-7.8%	-4.7%	38
Change in Total Funding, FY 2004–09	10.6%	14.6%	39
Clinical Trials, Initiated 2009	735	5,299	6
Higher Education Degrees in Bioscience Fields, AY 2008	6,206	161,811	7
Employment in Bioscience-related Occupations, 2008	21,820	717,510	10
Bioscience Venture Capital Investments, 2004–09 (\$ millions)	\$626.1	\$60,099	17
Bioscience and Related Patents, 2004–09	2,405	75,593	13

*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.

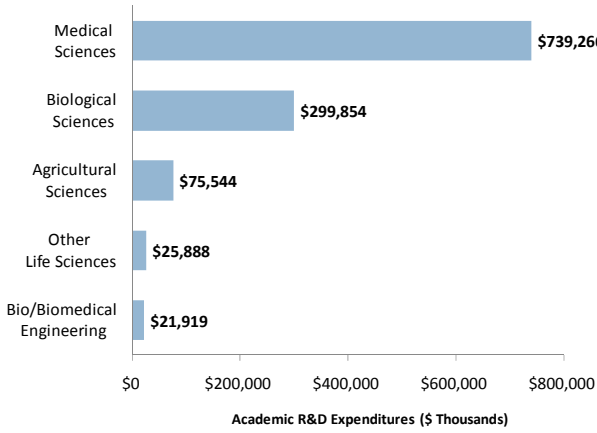
●●● Bioscience Industry Base, 2008

INDUSTRY SUBSECTOR	Ohio		United States	
	2008	2001-08 Change	2008	2001-08 Change
AGRICULTURAL FEEDSTOCK & CHEMICALS				
Establishments	124	61.0%	2,440	16.0%
Employment	6,836	-2.1%	114,793	1.9%
Location Quotient	1.51		n/a	
Direct-Effect Employment Multiplier	8.55		11.33	
Total Employment Impact	58,457		1,284,650	
Average Annual Wage	\$75,967		\$72,279	
DRUGS & PHARMACEUTICALS				
Establishments	38	-29.6%	2,771	6.4%
Employment	5,105	16.5%	311,882	2.3%
Location Quotient	0.42		n/a	
Direct-Effect Employment Multiplier	5.46		9.92	
Total Employment Impact	27,851		2,873,278	
Average Annual Wage	\$66,840		\$93,378	
MEDICAL DEVICES & EQUIPMENT				
Establishments	473	-8.9%	15,227	0.4%
Employment	11,633	-14.7%	435,509	2.0%
Location Quotient	0.68		n/a	
Direct-Effect Employment Multiplier	3.11		4.87	
Total Employment Impact	36,124		2,029,581	
Average Annual Wage	\$45,298		\$63,606	
RESEARCH, TESTING, & MEDICAL LABORATORIES				
Establishments	989	86.3%	27,154	57.7%
Employment	12,876	92.1%	558,140	46.1%
Location Quotient	0.59		n/a	
Direct-Effect Employment Multiplier	2.36		3.30	
Total Employment Impact	30,327		1,853,127	
Average Annual Wage	\$55,820		\$80,785	
TOTAL BIOSCIENCES INDUSTRY				
Establishments	1,624	37.5%	47,593	28.3%
Employment	36,450	15.0%	1,420,324	15.8%
Location Quotient	0.65		n/a	
Direct-Effect Employment Multiplier	4.19		5.82	
Total Employment Impact	152,760		8,040,636	
Average Annual Wage	\$57,784		\$77,595	
TOTAL PRIVATE SECTOR				
Establishments	279,099	2.3%	8,860,956	13.8%
Employment	4,485,365	-4.3%	113,917,377	3.5%
Average Annual Wage	\$40,214		\$45,229	

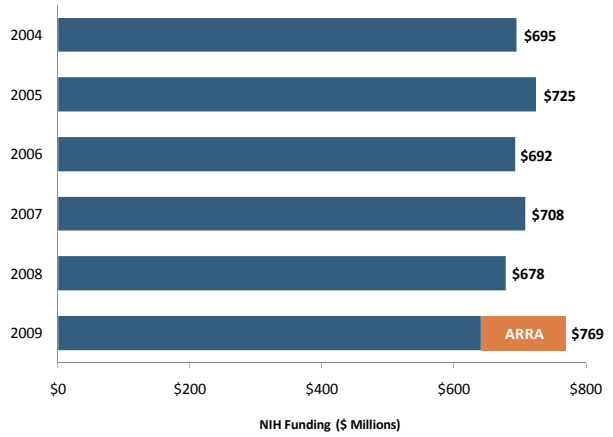
Note: U.S. employment metrics include Puerto Rico. Estimates of total employment impacts do not include Puerto Rico.

●●● Bioscience Performance Metrics

Bioscience Academic R&D Expenditures in Ohio, FY 2008

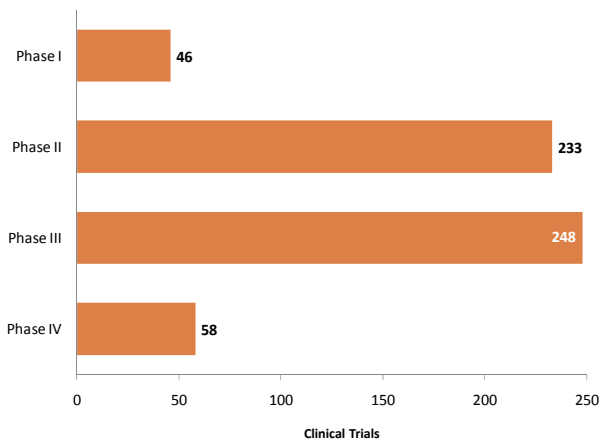


NIH Awards in Ohio, 2004–2009

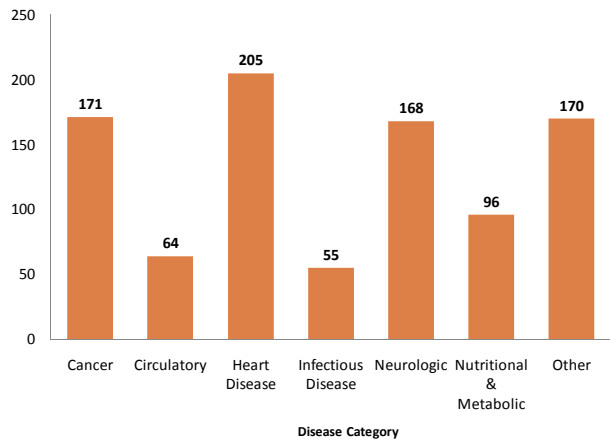


●●● Recent Clinical Trial Activities

Clinical Trials by Phase in Ohio, 2009

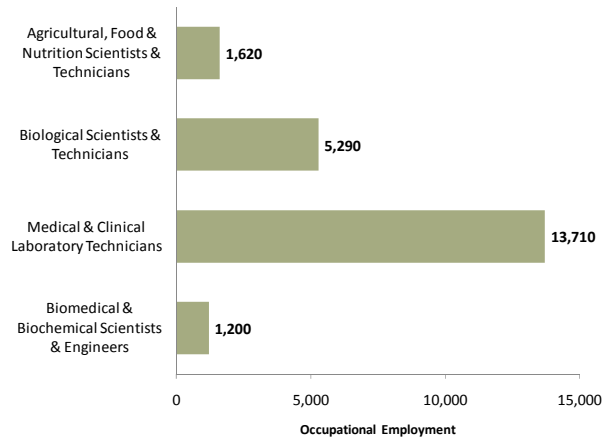


Clinical Trials by Major Disease Category in Ohio, 2009

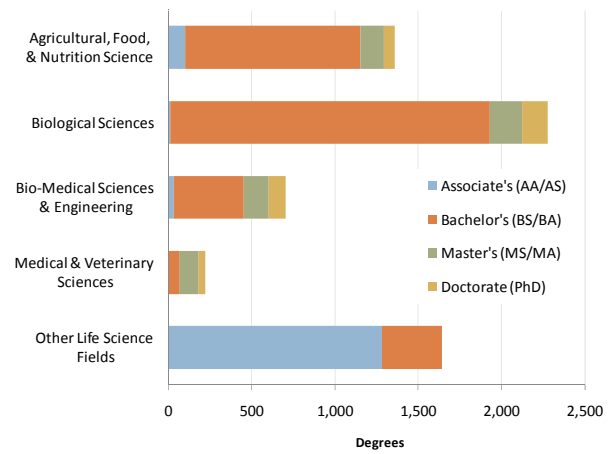


Bioscience Talent Base

Bioscience-related Occupational Employment in Ohio, 2008

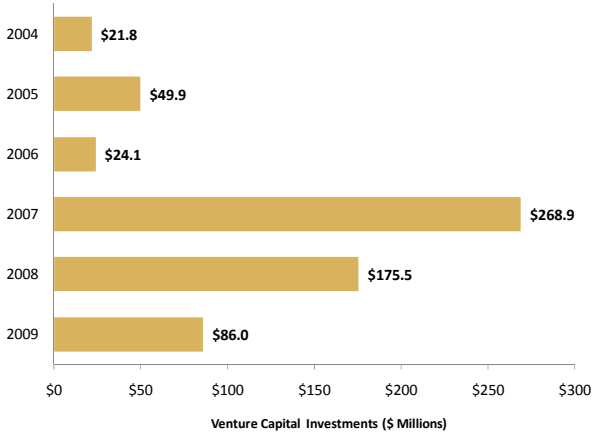


Bioscience-related Degrees in Ohio, AY 2008

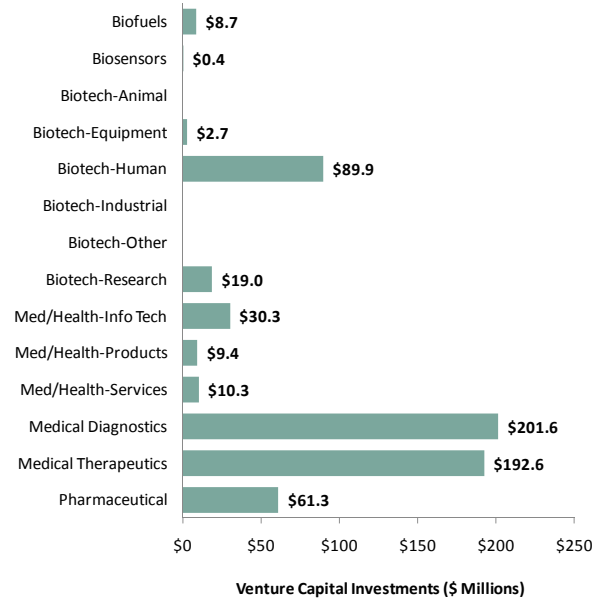


Bioscience Venture Capital

Bioscience-related Venture Capital Investments in Ohio, 2004–2009

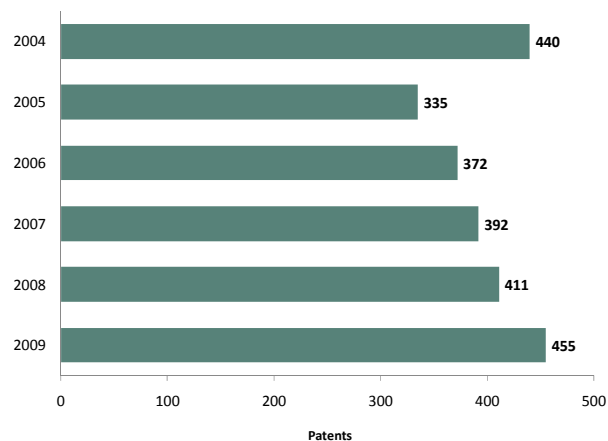


Bioscience-related Venture Capital Investments in Ohio by Segment, 2004–2009

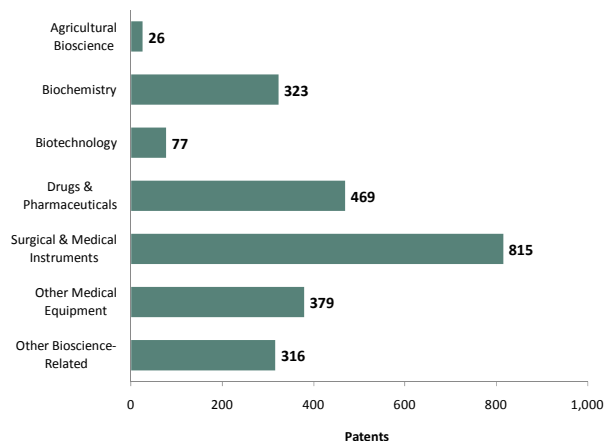


●●● Bioscience Patents

Bioscience-related Patents in Ohio, 2004–2009



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



State Bioscience Contacts

BioOhio

1275 Kinnear Road
Columbus, OH 43212
P: (614) 675-3686
F: (614) 615-3687
www.BioOhio.com

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 active 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