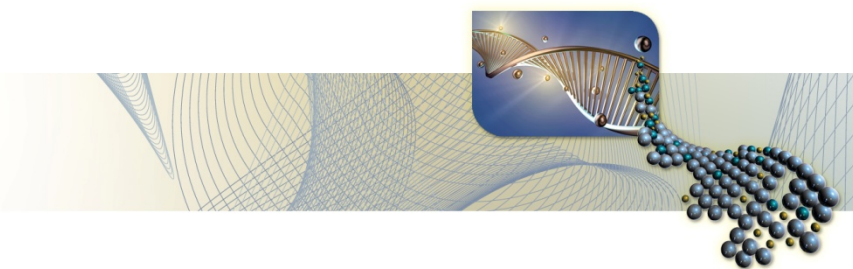


RHODE ISLAND



Rhode Island has a specialized employment concentration in two growing bioscience industry subsectors—drugs and pharmaceuticals (location quotient of 1.34) and medical devices and equipment (1.19). Total academic bioscience research and development expenditures were \$108 million in 2008, led by medical sciences and biological sciences. Rhode Island institutions received \$176 million in funding from the National Institutes of Health in 2009 following strong funding increases since 2004. The State is a leader in per capita NIH funding. Total venture capital invested in Rhode Island bioscience companies during the last six years was \$231 million, mainly in the biotechnology research, medical therapeutics, and human biotechnology sectors. Rhode Island’s 369 bioscience patents over the same six-year period were concentrated in surgical and medical instruments and drugs and pharmaceuticals.

●●● Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metrics	Rhode Island	United States	Rank*
Bioscience Industry, 2008			
Total Bioscience Industry Employment, 2008	4,822	1,420,324	V
Bioscience Industry Location Quotient, 2008	0.95	n/a	II
Biosciences Industry Establishments, 2008	239	47,593	IV
Academic R&D Expenditures, FY 2008			
Bioscience R&D (\$ thousands)	\$107,523	\$31,818,810	41
Bioscience Share of Total R&D	45.4%	61.3%	45
Bioscience R&D Per Capita	\$102.06	\$104.54	20
Change in Bioscience R&D, FY 2004–08	22.7%	22.3%	21
NIH Funding, FY 2009			
Total, Including ARRA Funds (\$ thousands)	\$176,432	\$25,837,590	30
Per Capita Funding	\$167.52	\$84.16	4
Change in Baseline Funding, FY 2004–09**	14.2%	-4.7%	6
Change in Total Funding, FY 2004–09	32.5%	14.6%	14
Clinical Trials, Initiated 2009	145	5,299	37
Higher Education Degrees in Bioscience Fields, AY 2008	827	161,811	39
Employment in Bioscience-related Occupations, 2008	1,570	717,510	49
Bioscience Venture Capital Investments, 2004–09 (\$ millions)	\$231.4	\$60,099	27
Bioscience and Related Patents, 2004–09	369	75,593	31

*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.

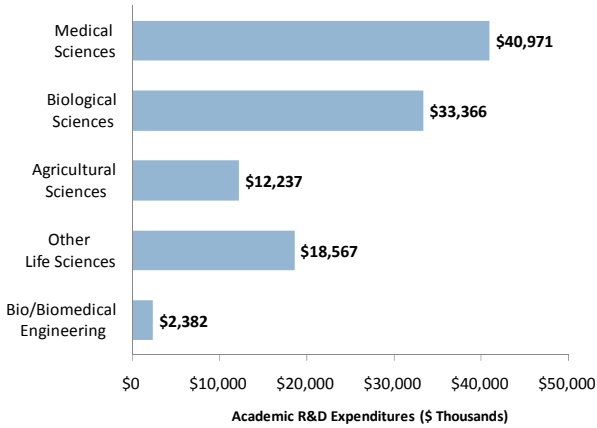
●●● Bioscience Industry Base, 2008

INDUSTRY SUBSECTOR	Rhode Island		United States	
	2008	2001-08 Change	2008	2001-08 Change
AGRICULTURAL FEEDSTOCK & CHEMICALS				
Establishments	3	-24.1%	2,440	16.0%
Employment	102	280.4%	114,793	1.9%
Location Quotient	0.25		n/a	
Direct-Effect Employment Multiplier	3.94		11.33	
Total Employment Impact	401		1,284,650	
Average Annual Wage	\$64,672		\$72,279	
DRUGS & PHARMACEUTICALS				
Establishments	17	30.8%	2,771	6.4%
Employment	1,492	184.2%	311,882	2.3%
Location Quotient	1.34		n/a	
Direct-Effect Employment Multiplier	5.60		9.92	
Total Employment Impact	8,356		2,873,278	
Average Annual Wage	\$85,940		\$93,378	
MEDICAL DEVICES & EQUIPMENT				
Establishments	78	0.7%	15,227	0.4%
Employment	1,857	15.5%	435,509	2.0%
Location Quotient	1.19		n/a	
Direct-Effect Employment Multiplier	2.48		4.87	
Total Employment Impact	4,615		2,029,581	
Average Annual Wage	\$51,746		\$63,606	
RESEARCH, TESTING, & MEDICAL LABORATORIES				
Establishments	141	64.2%	27,154	57.7%
Employment	1,371	6.3%	558,140	46.1%
Location Quotient	0.69		n/a	
Direct-Effect Employment Multiplier	2.00		3.30	
Total Employment Impact	2,737		1,853,127	
Average Annual Wage	\$67,315		\$80,785	
TOTAL BIOSCIENCES INDUSTRY				
Establishments	239	32.6%	47,593	28.3%
Employment	4,822	39.8%	1,420,324	15.8%
Location Quotient	0.95		n/a	
Direct-Effect Employment Multiplier	3.34		5.82	
Total Employment Impact	16,108		8,040,636	
Average Annual Wage	\$67,026		\$77,595	
TOTAL PRIVATE SECTOR				
Establishments	35,181	6.7%	8,860,956	13.8%
Employment	407,967	0.7%	113,917,377	3.5%
Average Annual Wage	\$41,093		\$45,229	

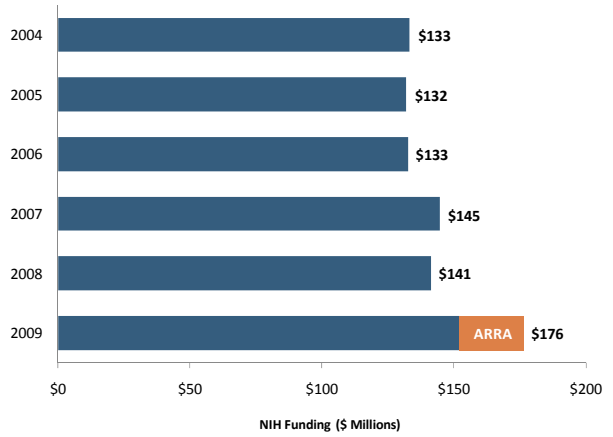
Note: U.S. employment metrics include Puerto Rico. Estimates of total employment impacts do not include Puerto Rico.

●●● Bioscience Performance Metrics

Bioscience Academic R&D Expenditures in Rhode Island, FY 2008

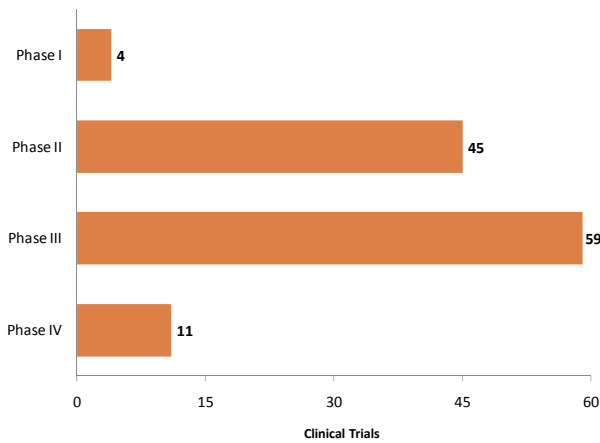


NIH Awards in Rhode Island, 2004–2009

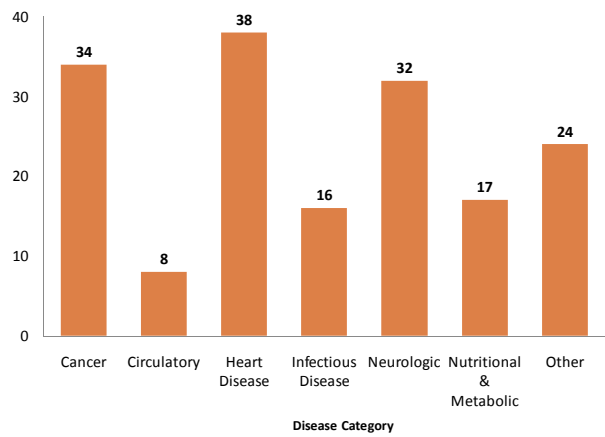


●●● Recent Clinical Trial Activities

Clinical Trials by Phase in Rhode Island, 2009

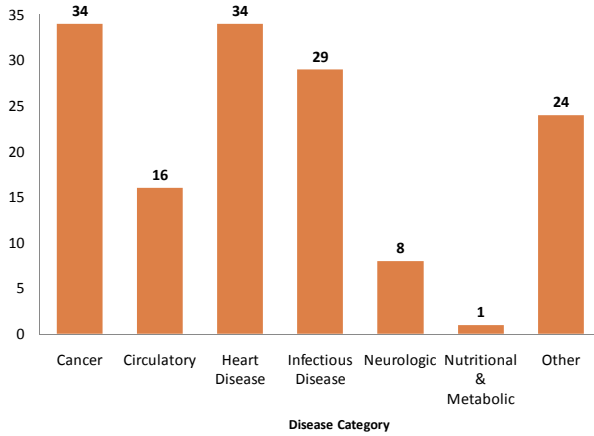


Clinical Trials by Major Disease Category in Rhode Island, 2009

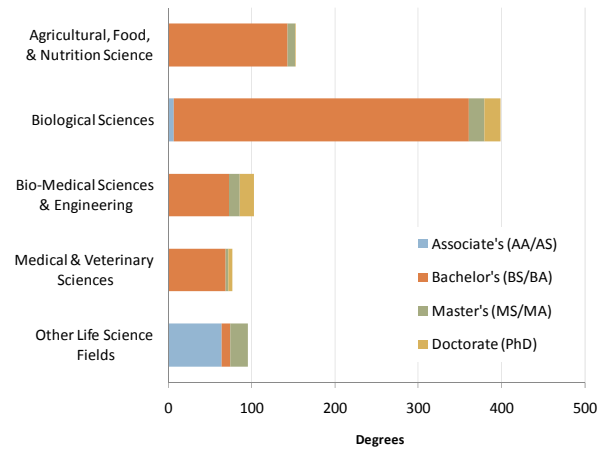


Bioscience Talent Base

Bioscience-related Occupational Employment in Rhode Island, 2008

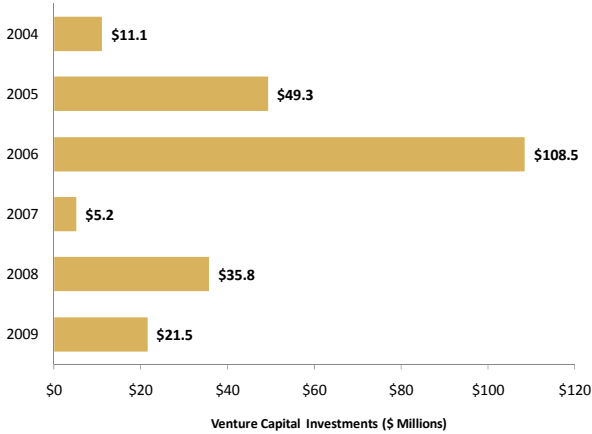


Bioscience-related Degrees in Rhode Island, AY 2008

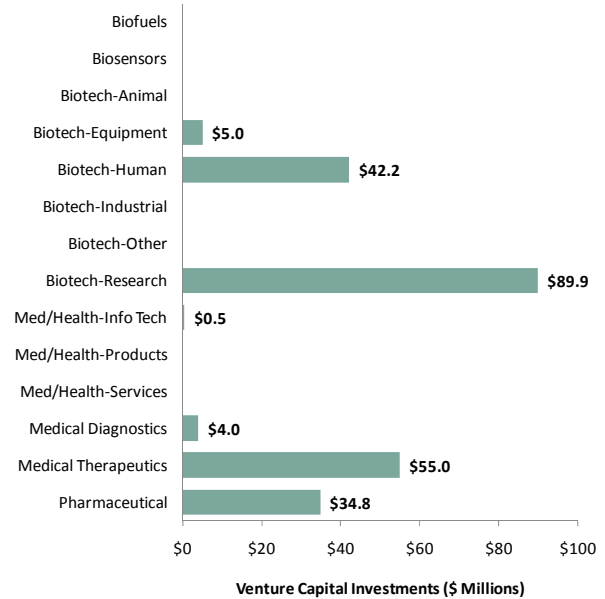


Bioscience Venture Capital

Bioscience-related Venture Capital Investments in Rhode Island, 2004–2009

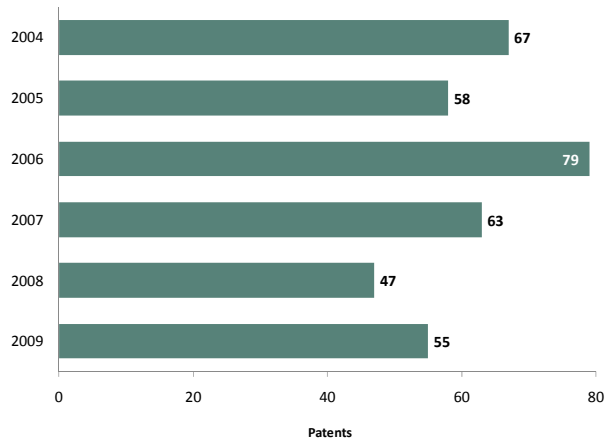


Bioscience-related Venture Capital Investments in Rhode Island by Segment, 2004–2009

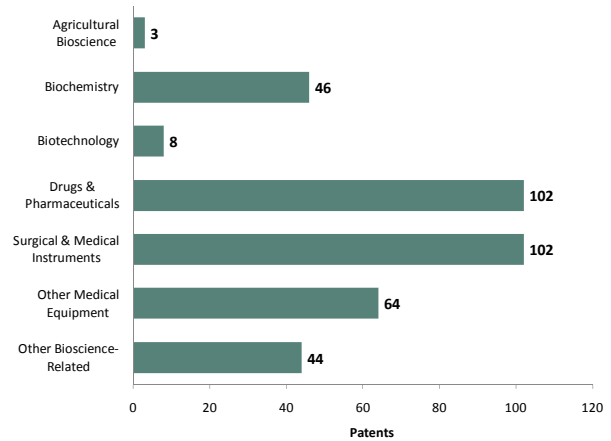


●●● Bioscience Patents

Bioscience-related Patents in Rhode Island, 2004–2009



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



State Bioscience Contact

BioGroup of Tech Collective

3 Davol Square, Suite 330 A

Providence, RI 02903

P: (401) 521-7805

F: (401) 521-7809

www.tech-collective.org

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 initiated 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