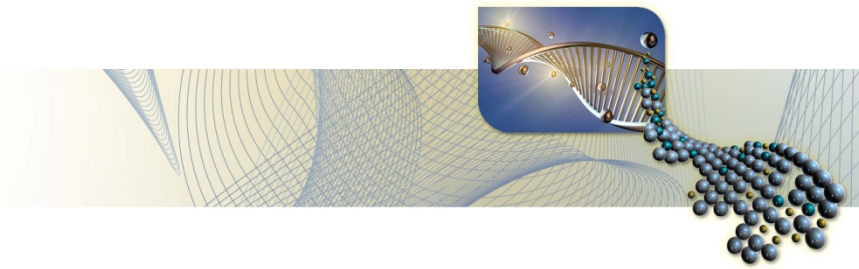


KANSAS



Kansas has an employment specialization in agricultural feedstock and chemicals (location quotient of 1.49) and a lesser employment concentration in research, testing and medical laboratories (1.12). Overall its bioscience industry has grown at a faster rate than the national sector since 2001. Academic bioscience research expenditures totaled \$249 million in 2008, with a strong R&D focus in the biological sciences. Growth in NIH funding to State institutions has been impressive and steady since 2004, increasing in baseline funding by 37 percent through 2009 and by 54 percent taking into account additional funds from the American Recovery and Reinvestment Act (ARRA). By 2009, total NIH funding reached \$116 million. Over the last six years \$120 million in venture capital has been invested in Kansas bioscience companies, peaking in 2007, and heavily concentrated in human biotechnology. Bioscience patents granted in the same period were mainly in surgical and medical instruments and drugs and pharmaceuticals.

●●● Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metrics	Kansas	United States	Rank*
Bioscience Industry, 2008			
Total Bioscience Industry Employment, 2008	11,960	1,420,324	III
Bioscience Industry Location Quotient, 2008	0.86	n/a	III
Biosciences Industry Establishments, 2008	464	47,593	IV
Academic R&D Expenditures, FY 2008			
Bioscience R&D (\$ thousands)	\$249,323	\$31,818,810	31
Bioscience Share of Total R&D	61.8%	61.3%	25
Bioscience R&D Per Capita	\$89.13	\$104.54	28
Change in Bioscience R&D, FY 2004–08	19.1%	22.3%	28
NIH Funding, FY 2009			
Total, Including ARRA Funds (\$ thousands)	\$116,056	\$25,837,590	34
Per Capita Funding	\$41.17	\$84.16	35
Change in Baseline Funding, FY 2004–09**	37.0%	-4.7%	1
Change in Total Funding, FY 2004–09	54.0%	14.6%	2
Clinical Trials, Initiated 2009	270	5,299	29
Higher Education Degrees in Bioscience Fields, AY 2008	1,670	161,811	32
Employment in Bioscience-related Occupations, 2008	7,210	717,510	29
Bioscience Venture Capital Investments, 2004–09 (\$ millions)	\$120.0	\$60,099	32
Bioscience and Related Patents, 2004–09	318	75,593	34

*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.

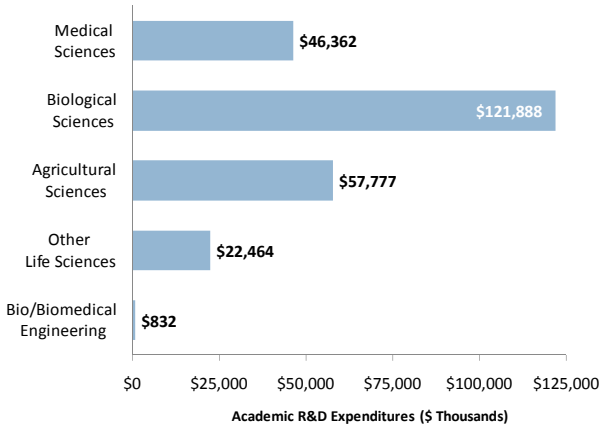
●●● Bioscience Industry Base, 2008

INDUSTRY SUBSECTOR	Kansas		United States	
	2008	2001-08 Change	2008	2001-08 Change
AGRICULTURAL FEEDSTOCK & CHEMICALS				
Establishments	45	15.6%	2,440	16.0%
Employment	1,682	-6.0%	114,793	1.9%
Location Quotient	1.49		n/a	
Direct-Effect Employment Multiplier	6.15		11.33	
Total Employment Impact	10,337		1,284,650	
Average Annual Wage	\$53,660		\$72,279	
DRUGS & PHARMACEUTICALS				
Establishments	20	-13.0%	2,771	6.4%
Employment	2,239	120.2%	311,882	2.3%
Location Quotient	0.73		n/a	
Direct-Effect Employment Multiplier	4.83		9.92	
Total Employment Impact	10,809		2,873,278	
Average Annual Wage	\$58,469		\$93,378	
MEDICAL DEVICES & EQUIPMENT				
Establishments	114	-19.7%	15,227	0.4%
Employment	1,877	-26.1%	435,509	2.0%
Location Quotient	0.44		n/a	
Direct-Effect Employment Multiplier	2.27		4.87	
Total Employment Impact	4,264		2,029,581	
Average Annual Wage	\$40,088		\$63,606	
RESEARCH, TESTING, & MEDICAL LABORATORIES				
Establishments	285	73.1%	27,154	57.7%
Employment	6,162	54.4%	558,140	46.1%
Location Quotient	1.12		n/a	
Direct-Effect Employment Multiplier	2.07		3.30	
Total Employment Impact	12,738		1,853,127	
Average Annual Wage	\$55,854		\$80,785	
TOTAL BIOSCIENCES INDUSTRY				
Establishments	464	25.9%	47,593	28.3%
Employment	11,960	28.1%	1,420,324	15.8%
Location Quotient	0.86		n/a	
Direct-Effect Employment Multiplier	3.19		5.82	
Total Employment Impact	38,148		8,040,636	
Average Annual Wage	\$53,561		\$77,595	
TOTAL PRIVATE SECTOR				
Establishments	81,037	7.0%	8,860,956	13.8%
Employment	1,117,982	3.2%	113,917,377	3.5%
Average Annual Wage	\$38,731		\$45,229	

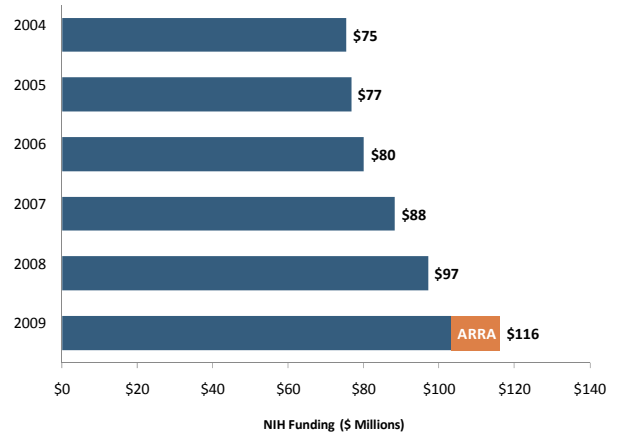
Note: U.S. employment metrics include Puerto Rico. Estimates of total employment impacts do not include Puerto Rico.

Bioscience Performance Metrics

Bioscience Academic R&D Expenditures in Kansas, FY 2008

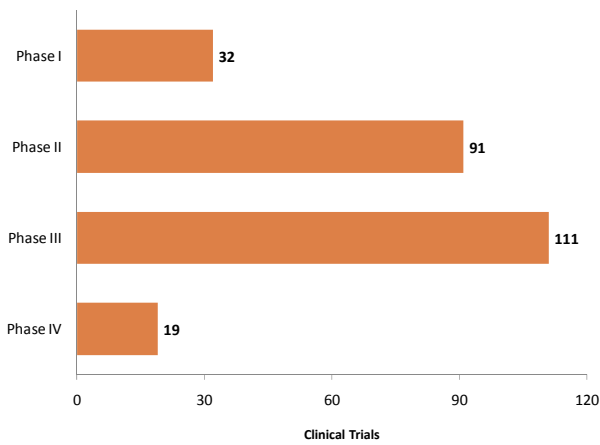


NIH Awards in Kansas, 2004–2009

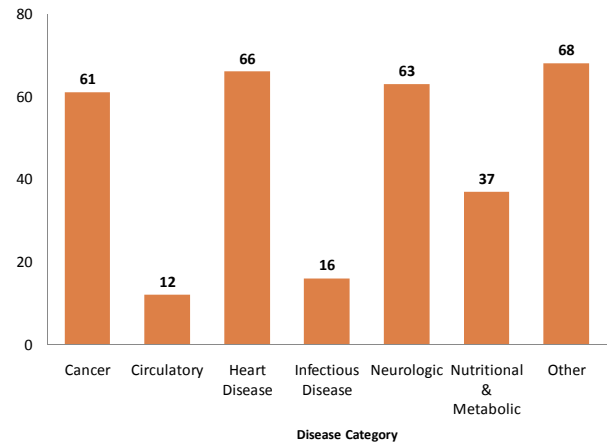


Recent Clinical Trial Activities

Clinical Trials by Phase in Kansas, 2009

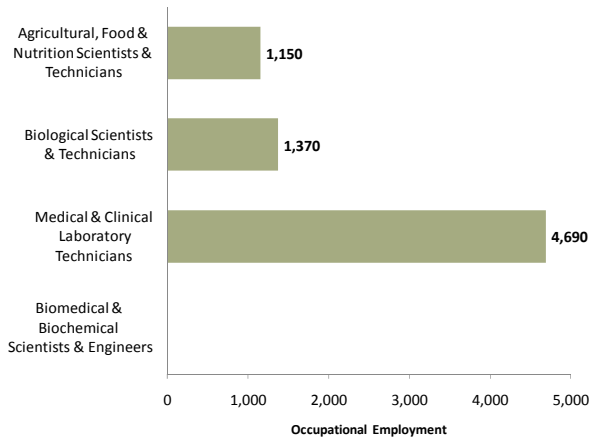


Clinical Trials by Major Disease Category in Kansas, 2009

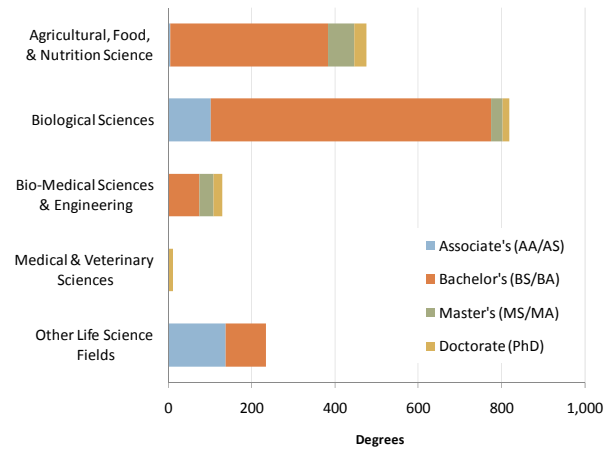


Bioscience Talent Base

Bioscience-related Occupational Employment in Kansas, 2008

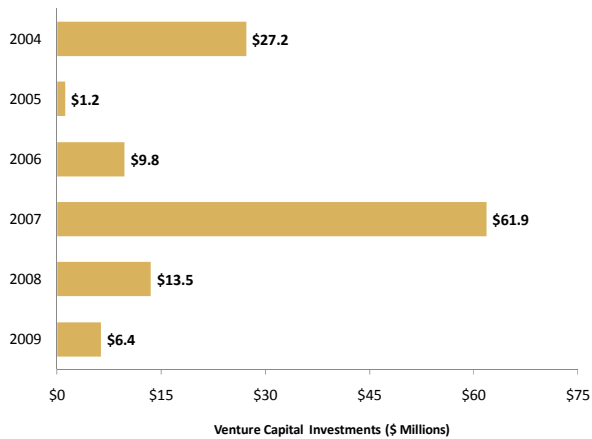


Bioscience-related Degrees in Kansas, AY 2008

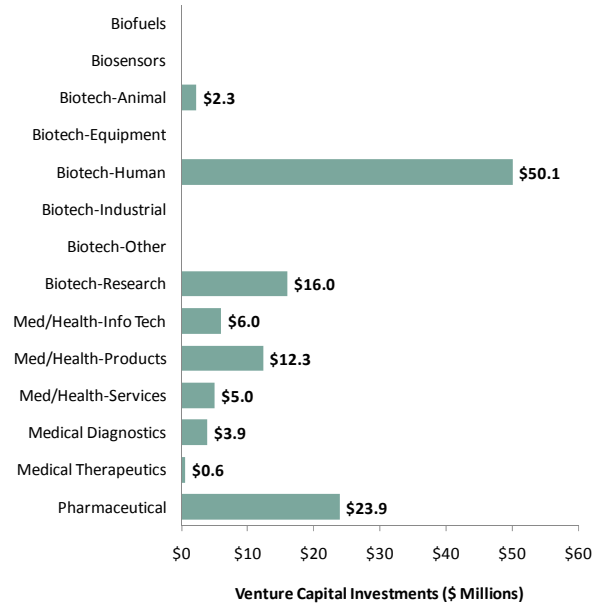


Bioscience Venture Capital

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

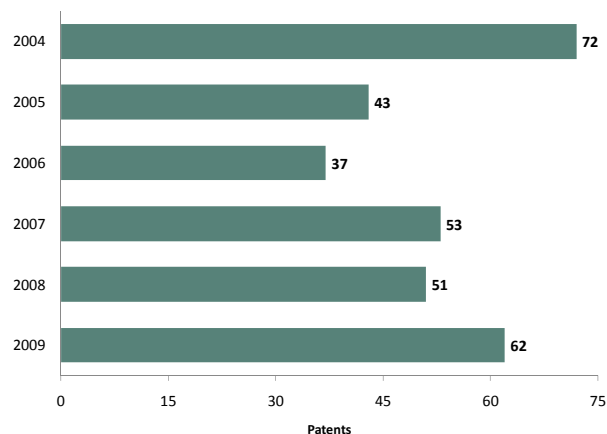


Bioscience-related Venture Capital Investments in Kansas by Segment, 2004–2009

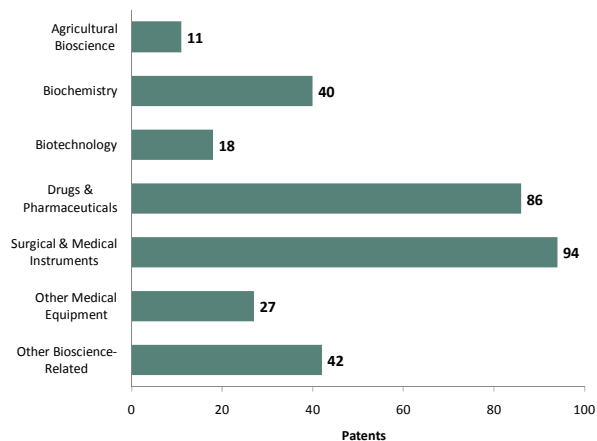


●●● Bioscience Patents

Bioscience-related Patents in Kansas, 2004–2009



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



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 F: (913) 888-6928
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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 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