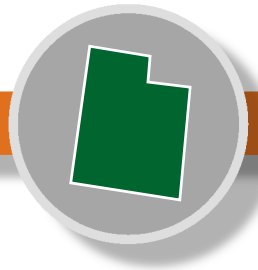
Utah



Utah is home to a highly specialized, diverse, and rapidly growing bioscience industry. State bioscience companies employed more than 25,000 in 2012 while operating 969 business establishments. Utah has grown its bioscience industry employment base by 17 percent since 2007, a period which includes the deep national recession and early years of the recovery. Four of five major industry subsectors have contributed to Utah's bioscience growth over this 5-year period (the exception is agricultural feedstock and chemicals which has a small state presence). Utah has a specialized employment concentration in three subsectors—medical devices; drugs and pharmaceuticals; and research, testing, and medical labs. The state's bioscience firms have received nearly $271 million in venture capital investments since 2009 with funding focused in medical therapeutics and health IT/software.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Utah	United States	Quintile
Bioscience Industry, 2012			
Bioscience Industry Employment	25,101	1,619,746	III
Bioscience Industry Location Quotient	1.71	n/a	I
Bioscience Industry Establishments	969	73,088	III
Academic Bioscience R&D Expenditures, FY 2012			
Bioscience R&D ($ thousands)	$336,917	$38,139,876	III
Bioscience Share of Total R&D	55%	61%	III
Bioscience R&D Per Capita	$116	$119	II
NIH Funding, FY 2013			
Funding ($ thousands)	$159,171	$22,293,255	III
Funding Per Capita	$55	$70	III
Bioscience Venture Capital Investments, 2009–13 ($ millions)	$270.7	$49,401.7	II
Bioscience and Related Patents, 2009–13	1,359	100,238	III

State ranking figures for bioscience performance metrics are calculated as quintiles, where I = top quintile, III = middle quintile, and V = bottom quintile.

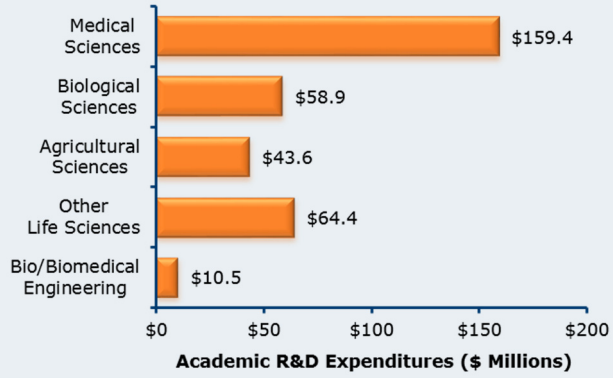
For source notes, see end of State Profile.

Industry Subsector	Utah		United States	
	2012	2007–2012 Change	2012	2007–2012 Change
Agricultural Feedstock & Chemicals				
Establishments	14	19.4%	1,772	5.2%
Employment	204	-17.2%	76,404	-1.0%
Location Quotient	0.30		n/a	
Direct-Effect Employment Multiplier	14.8		18.1	
Total Employment Impact	3,022		1,382,637	
Average Annual Wage	$45,476	-10.3%	$75,828	14.2%
Bioscience-Related Distribution				
Establishments	539	22.3%	36,793	1.4%
Employment	4,519	22.4%	442,016	-3.9%
Location Quotient	0.97		n/a	
Direct-Effect Employment Multiplier	2.9		2.7	
Total Employment Impact	12,917		1,199,015	
Average Annual Wage	$72,881	11.3%	$85,188	11.5%
Drugs and Pharmaceuticals				
Establishments	82	12.3%	3,057	12.0%
Employment	4,915	7.6%	284,331	-10.9%
Location Quotient	1.91		n/a	
Direct-Effect Employment Multiplier	10.7		9.9	
Total Employment Impact	52,734		2,673,265	
Average Annual Wage	$58,755	24.3%	$106,576	13.9%
Medical Devices and Equipment				
Establishments	116	28.9%	7,235	12.0%
Employment	9,445	13.9%	349,432	1.4%
Location Quotient	2.99		n/a	
Direct-Effect Employment Multiplier	4.0		3.9	
Total Employment Impact	37,932		1,318,459	
Average Annual Wage	$57,540	7.1%	$75,695	10.7%
Research, Testing, and Medical Laboratories				
Establishments	217	21.7%	24,231	31.0%
Employment	6,017	28.5%	467,563	9.7%
Location Quotient	1.42		n/a	
Direct-Effect Employment Multiplier	2.6		2.7	
Total Employment Impact	15,747		1,284,196	
Average Annual Wage	$61,523	8.6%	$91,248	15.9%
Total Bioscience Industry				
Establishments	969	22.0%	73,088	11.4%
Employment	25,101	16.9%	1,619,746	-0.4%
Location Quotient	1.71		n/a	
Direct-Effect Employment Multiplier	5.1		4.9	
Total Employment Impact	127,039		7,857,572	
Average Annual Wage	$61,397	11.7%	$88,202	12.8%
Total Private Sector				
Establishments	81,764	-1.5%	8,699,564	-0.5%
Employment	1,006,179	-1.8%	111,137,206	-3.1%
Average Annual Wage	$41,161	12.3%	$49,130	11.1%

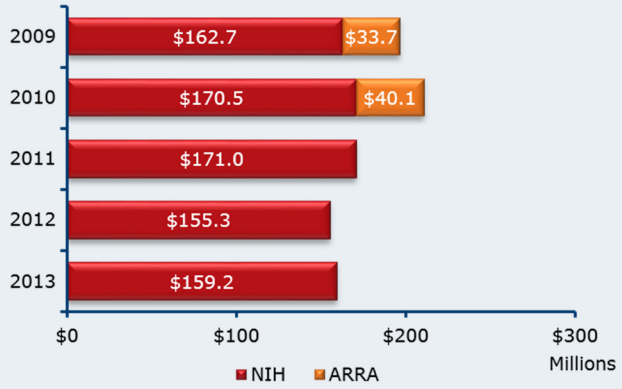
Note: U.S. employment metrics include Puerto Rico. Estimates of total impacts do not include Puerto Rico.

Bioscience Research in Utah

Bioscience Academic R&D Expenditures, FY 2012



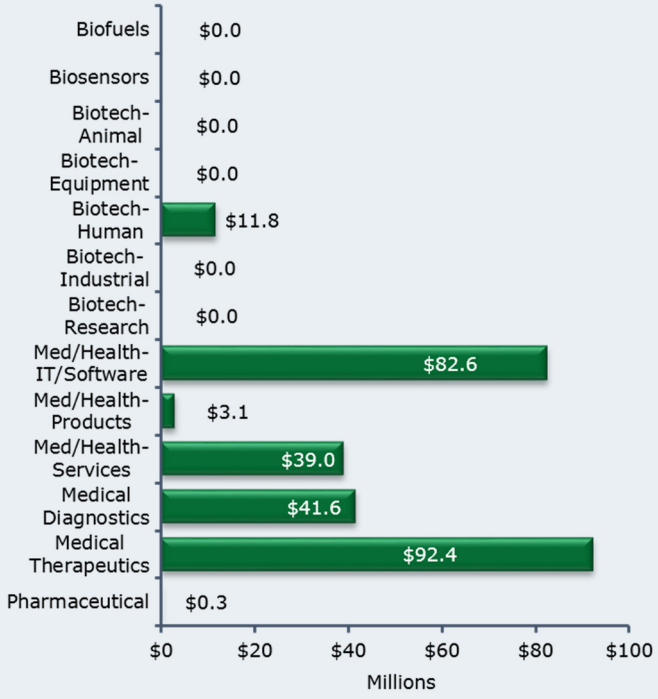
NIH Awards, 2009–2013



Bioscience Venture Capital in Utah

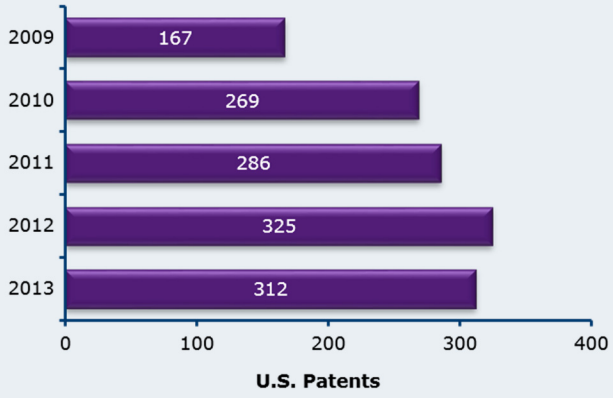
Bioscience-Related Venture Capital Investments, 2009–2013

Bioscience-Related Venture Capital Investments by Segment, 2009–2013

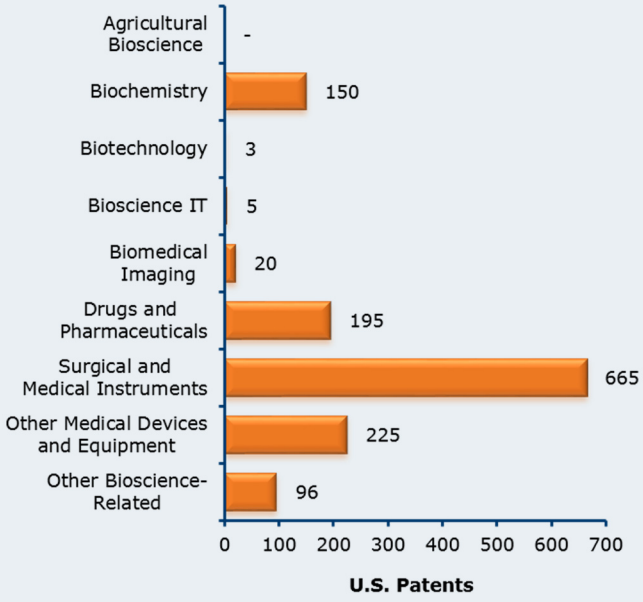


Bioscience Patents in Utah

Bioscience-Related Patents, 2009–2013



Bioscience-Related Patents by Segment, 2009–2013



Source Notes

Employment, Establishments, and Wages: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), enhanced file from the IMPLAN Group, LLC.

Employment Multipliers: IMPLAN Group, LLC state-level Input/Output models.

Academic R&D Expenditures: National Science Foundation (NSF) Higher Education Research and Development (HERD) Survey.

NIH Funding: National Institutes of Health, *NIH Awards by Location & Organization* (summary information within RePORT database), and NIH-managed funding for FY 2009 and FY 2010 from the American Recovery and Reinvestment Act (ARRA) website.

Venture Capital: Thomson Reuters Thomson ONE venture capital database.

Patents: U.S. Patent & Trademark Office data from Thomson Reuters Delphion Patent Analysis Database.

For a more detailed discussion of the data and methodology used, please see the Appendix to the full national report.