

New York



New York's large bioscience industry employed just over 76,000 in 2012 while operating 2,960 business establishments across the state. The state's largest subsector component, research, testing, and medical labs, has increased employment by nearly 17 percent since 2007, though these gains were not enough to offset job losses in other state subsectors. New York is among the top tier of states in the size and concentration of its bioscience and biomedical research complex. The state's research universities conducted \$3.5 billion in bioscience academic R&D in 2012. New York institutions, both academic and non-academic, have received \$1.9 billion in funding from NIH in 2013. State inventors were issued 6,376 patents from 2009 through 2013 in bioscience-related technologies. Key areas of bioscience innovation include drugs and pharmaceuticals, surgical and medical instruments, and biochemistry.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

| Metric | New York | United States | Quintile |
|--|-------------|---------------|----------|
| Bioscience Industry, 2012 | | | |
| Bioscience Industry Employment | 76,070 | 1,619,746 | I |
| Bioscience Industry Location Quotient | 0.73 | n/a | IV |
| Bioscience Industry Establishments | 2,960 | 73,088 | I |
| Academic Bioscience R&D Expenditures, FY 2012 | | | |
| Bioscience R&D (\$ thousands) | \$3,521,803 | \$38,139,876 | I |
| Bioscience Share of Total R&D | 68% | 61% | II |
| Bioscience R&D Per Capita | \$179 | \$119 | I |
| NIH Funding, FY 2013 | | | |
| Funding (\$ thousands) | \$1,946,868 | \$22,293,255 | I |
| Funding Per Capita | \$99 | \$70 | I |
| Bioscience Venture Capital Investments, 2009–13 (\$ millions) | \$985.3 | \$49,401.7 | II |
| Bioscience and Related Patents, 2009–13 | 6,376 | 100,238 | I |

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

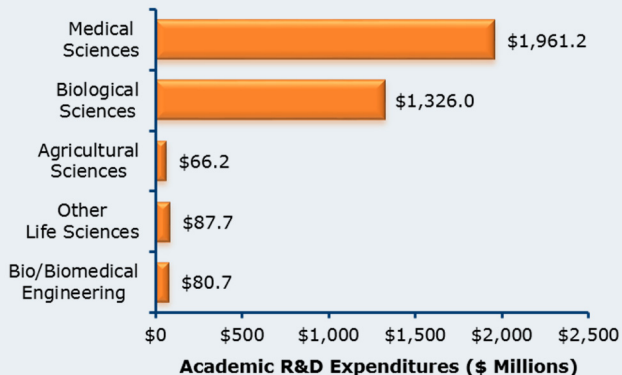
For source notes, see end of State Profile.

| Industry Subsector | New York | | United States | |
|--|-----------|------------------|---------------|------------------|
| | 2012 | 2007-2012 Change | 2012 | 2007-2012 Change |
| Agricultural Feedstock & Chemicals | | | | |
| Establishments | 42 | 2.4% | 1,772 | 5.2% |
| Employment | 1,513 | 45.1% | 76,404 | -1.0% |
| Location Quotient | 0.31 | | n/a | |
| Direct-Effect Employment Multiplier | 11.9 | | 18.1 | |
| Total Employment Impact | 17,936 | | 1,382,637 | |
| Average Annual Wage | \$68,627 | 9.1% | \$75,828 | 14.2% |
| Bioscience-Related Distribution | | | | |
| Establishments | 1,347 | -1.8% | 36,793 | 1.4% |
| Employment | 16,427 | -5.8% | 442,016 | -3.9% |
| Location Quotient | 0.58 | | n/a | |
| Direct-Effect Employment Multiplier | 2.5 | | 2.7 | |
| Total Employment Impact | 41,507 | | 1,199,015 | |
| Average Annual Wage | \$84,815 | 9.8% | \$85,188 | 11.5% |
| Drugs and Pharmaceuticals | | | | |
| Establishments | 180 | 5.3% | 3,057 | 12.0% |
| Employment | 19,723 | -9.2% | 284,331 | -10.9% |
| Location Quotient | 1.08 | | n/a | |
| Direct-Effect Employment Multiplier | 8.8 | | 9.9 | |
| Total Employment Impact | 174,534 | | 2,673,265 | |
| Average Annual Wage | \$74,612 | 6.6% | \$106,576 | 13.9% |
| Medical Devices and Equipment | | | | |
| Establishments | 347 | -5.7% | 7,235 | 12.0% |
| Employment | 13,059 | -13.7% | 349,432 | 1.4% |
| Location Quotient | 0.58 | | n/a | |
| Direct-Effect Employment Multiplier | 3.3 | | 3.9 | |
| Total Employment Impact | 43,224 | | 1,318,459 | |
| Average Annual Wage | \$65,600 | 7.4% | \$75,695 | 10.7% |
| Research, Testing, and Medical Laboratories | | | | |
| Establishments | 1,044 | 14.0% | 24,231 | 31.0% |
| Employment | 25,347 | 16.6% | 467,563 | 9.7% |
| Location Quotient | 0.84 | | n/a | |
| Direct-Effect Employment Multiplier | 2.4 | | 2.7 | |
| Total Employment Impact | 61,118 | | 1,284,196 | |
| Average Annual Wage | \$77,055 | 17.8% | \$91,248 | 15.9% |
| Total Bioscience Industry | | | | |
| Establishments | 2,960 | 3.3% | 73,088 | 11.4% |
| Employment | 76,070 | -1.3% | 1,619,746 | -0.4% |
| Location Quotient | 0.73 | | n/a | |
| Direct-Effect Employment Multiplier | 4.6 | | 4.9 | |
| Total Employment Impact | 347,891 | | 7,857,572 | |
| Average Annual Wage | \$75,963 | 10.9% | \$88,202 | 12.8% |
| Total Private Sector | | | | |
| Establishments | 551,367 | -2.3% | 8,699,564 | -0.5% |
| Employment | 7,155,170 | 0.5% | 111,137,206 | -3.1% |
| Average Annual Wage | \$64,080 | 4.5% | \$49,130 | 11.1% |

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

Bioscience Research in New York

Bioscience Academic R&D Expenditures, FY 2012



NIH Awards, 2009–2013

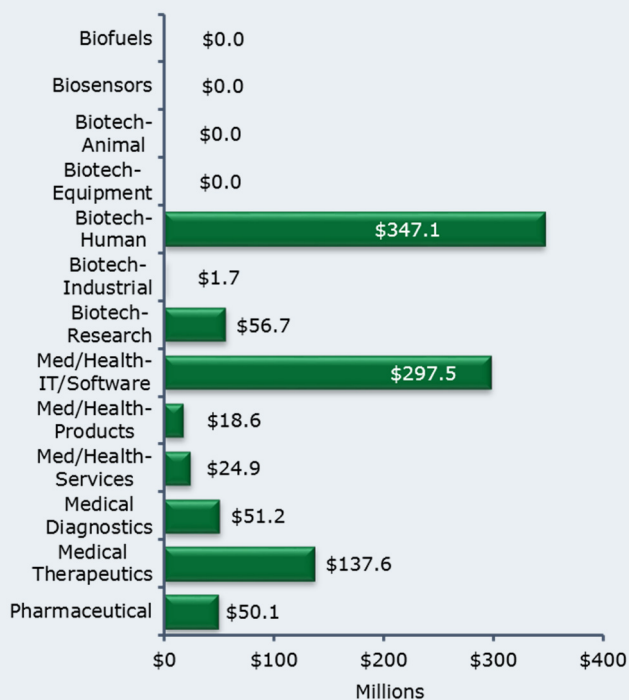


Bioscience Venture Capital in New York

Bioscience-Related Venture Capital Investments, 2009–2013

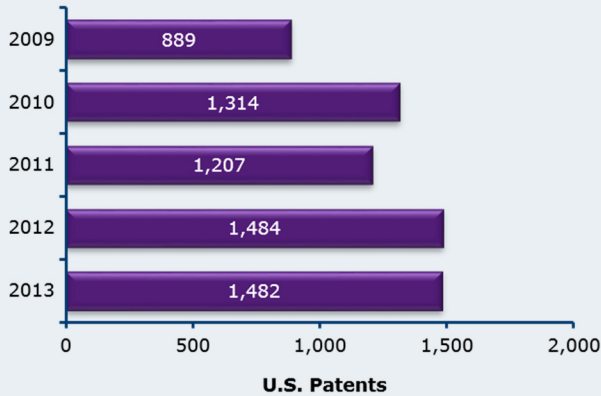


Bioscience-Related Venture Capital Investments by Segment, 2009–2013

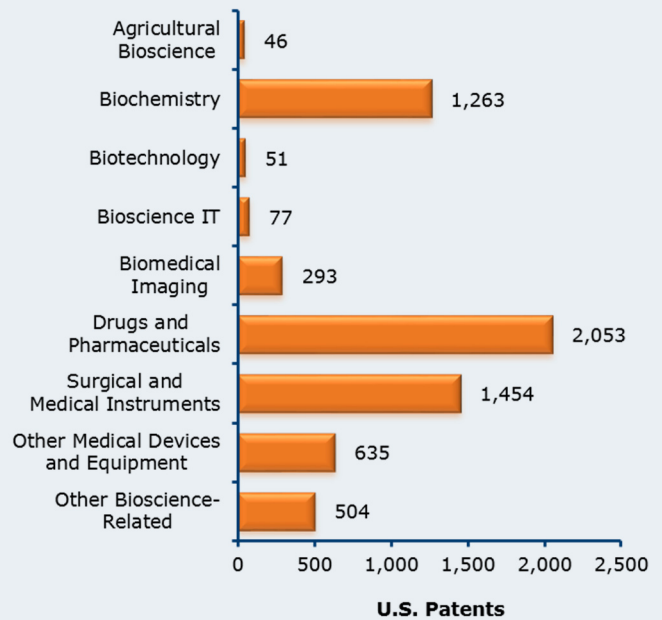


Bioscience Patents in New York

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.