GEORGIA

Investment, Innovation and Job Creation in a Growing U.S. Bioscience Industry 2018

Georgia is home to a large bioscience industry that has grown at a rapid pace in recent years. The state's bioscience firms have grown their employment base by 10.6 percent since 2014 and employed just over 32,000 in 2016. Companies have also expanded their establishment count by 16 percent during this same period and now operate 2,431 across the state. Four of the five major industry subsectors have increased employment during the 2-year period. Georgia's research universities conducted nearly $1.1 billion in bioscience-related academic R&D in 2016; funded, in part, by a growing base of NIH awards that reached $537 million in FY 2017.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Georgia	United States	Quintile
Bioscience Industry, 2016			
Bioscience Industry Employment	32,040	1,743,639	II
Bioscience Industry Location Quotient	0.62	n/a	IV
Bioscience Industry Establishments	2,431	85,702	II
Academic Bioscience R&D Expenditures, FY 2016			
Bioscience R&D ($ thousands)	$1,059,056	$41,972,205	II
Bioscience Share of Total R&D	52%	62%	IV
Bioscience R&D Per Capita	$103	$130	III
NIH Funding, FY 2017			
Funding ($ thousands)	$537,433	$26,150,485	II
Funding Per Capita	$52	$80	III
Bioscience Venture Capital Investments, 2014-17 ($ millions)	$691.59	$66,168.62	II
Bioscience and Related Patents, 2014-17	2,208	102,862	II

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.

GEORGIA

Industry Subsector	Georgia		United States	
	2016	2014–2016 Change	2016	2014–2016 Change
Agricultural Feedstock and Industrial Biosciences				
Establishments	50	2.0%	1,709	-3.2%
Employment	1,099	-2.0%	68,027	-1.2%
Location Quotient	0.54		n/a	
Direct-Effect Employment Multiplier	6.73			
Total Employment Impact	7,400			
Average Annual Wage	$61,248	16.6%	$80,961	2.7%
Bioscience-Related Distribution				
Establishments	1,060	9.8%	39,149	3.8%
Employment	14,306	13.2%	469,640	3.7%
Location Quotient	1.02		n/a	
Direct-Effect Employment Multiplier	2.41			
Total Employment Impact	34,476			
Average Annual Wage	$93,744	-0.5%	$93,677	2.7%
Drugs and Pharmaceuticals				
Establishments	95	17.3%	3,754	13.7%
Employment	3,225	7.6%	299,113	2.0%
Location Quotient	0.36		n/a	
Direct-Effect Employment Multiplier	5.93			
Total Employment Impact	19,118			
Average Annual Wage	$100,130	21.3%	$113,815	-3.2%
Medical Devices and Equipment				
Establishments	189	22.7%	8,083	5.9%
Employment	4,746	13.6%	359,293	2.9%
Location Quotient	0.44		n/a	
Direct-Effect Employment Multiplier	3.07			
Total Employment Impact	14,554			
Average Annual Wage	$76,507	9.2%	$84,746	6.5%
Research, Testing and Medical Laboratories				
Establishments	1,037	22.5%	33,007	13.1%
Employment	8,664	7.9%	547,566	8.2%
Location Quotient	0.53		n/a	
Direct-Effect Employment Multiplier	2.21			
Total Employment Impact	19,139			
Average Annual Wage	$70,717	24.0%	$106,942	5.5%
Total Bioscience Industry				
Establishments	2,431	16.0%	85,702	7.7%
Employment	32,040	10.6%	1,743,639	4.4%
Location Quotient	0.62		n/a	
Direct-Effect Employment Multiplier	2.96			
Total Employment Impact	94,687			
Average Annual Wage	$84,492	8.9%	$98,961	3.1%
Total Private Sector				
Establishments	268,131	6.9%	9,243,034	3.4%
Employment	3,599,891	6.6%	120,884,570	4.2%
Average Annual Wage	$51,356	5.2%	$53,354	4.3%

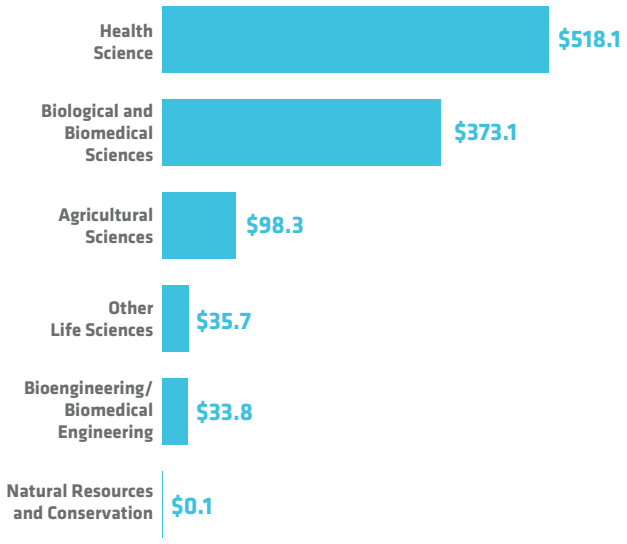
Note: U.S. employment metrics include Puerto Rico.

Bioscience Research in Georgia

Bioscience Academic R&D Expenditures

$ Millions

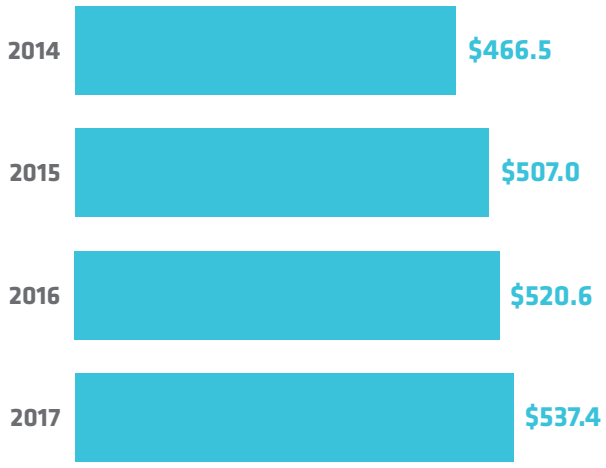
FY 2016



NIH Awards

$ Millions

FY 2014-2017

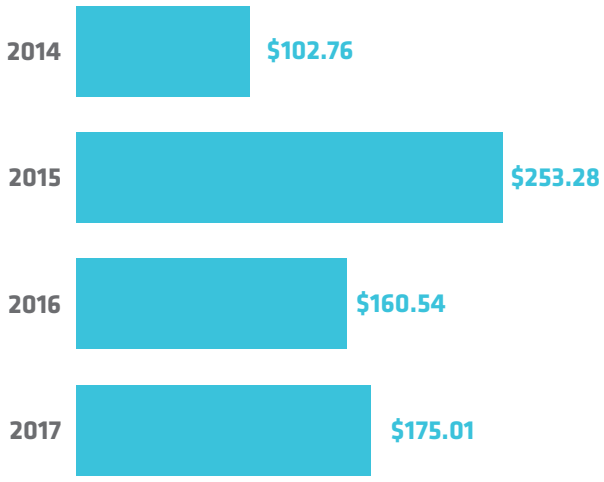


Bioscience Venture Capital in Georgia

Bioscience-Related Venture Capital Investments

$ Millions

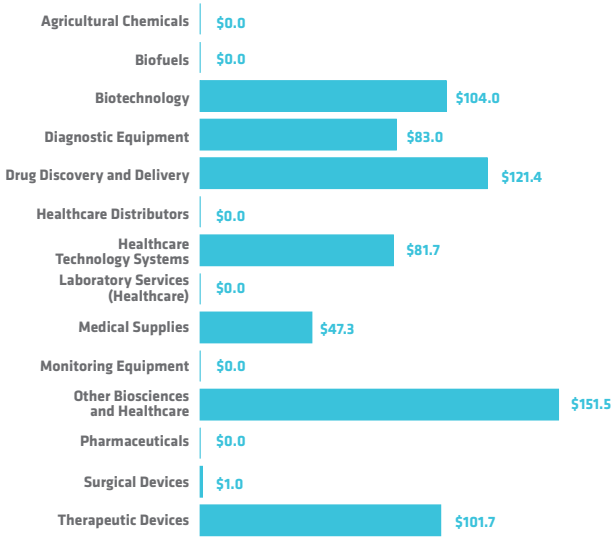
2014-2017



Bioscience-Related Venture Capital Investments by Segment

$ Millions

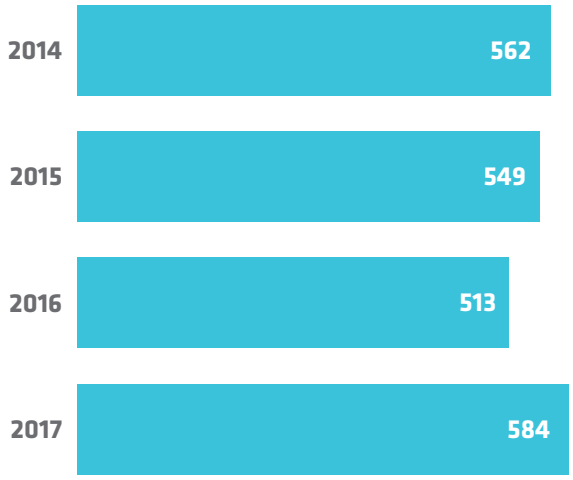
2014-2017



Bioscience Patents in Georgia

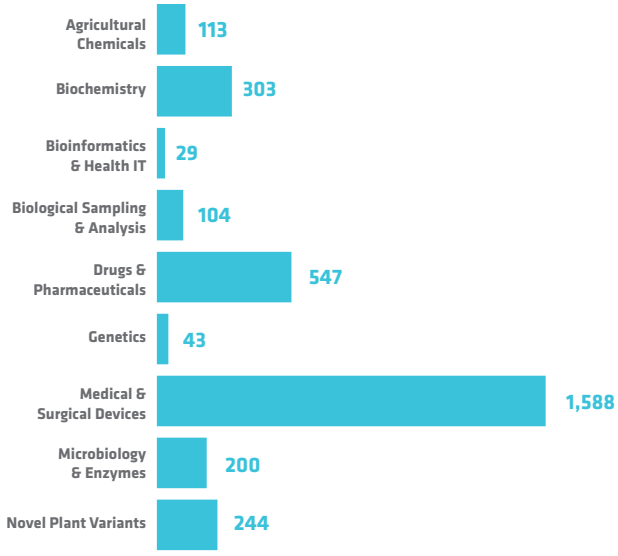
Bioscience-Related U.S. Patents

2014-2017



Bioscience-Related U.S. Patents by Segment

2014-2017



Source Notes

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

Employment Multipliers: IMPLAN 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).

Venture Capital: PitchBook Data, Inc.

Patents: U.S. Patent & Trademark Office data from Clarivate Analytics' Derwent Innovation patent analysis database.

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

TECONOMY PARTNERS LLC

Bio Biotechnology Innovation Organization

25 YEARS OF INNOVATION