



Florida

TECONOMY/BIO

The Bioscience Economy: Propelling Life-Saving Treatments, Supporting State & Local Communities

Florida's bioscience industry is large and growing, with employment increasing by 7 percent since 2016 to reach 93,534 jobs. This employment growth rate matched that for the nation. Florida has a specialized employment concentration in bioscience-related distribution 24 percent above the national average (location quotient is 1.24) and an above-average concentration in agricultural feedstock and industrial biosciences. Florida's universities combined to perform \$1.5 billion in bioscience-related R&D in 2018, among the top tier of states in academic research. State inventors are associated with 5,459 patents awarded from 2016 through 2019 in bioscience-related technology classes, a volume that also places Florida in the top tier of states. VC investments in Florida bioscience companies have been increasing and totaled nearly \$1.3 billion during the 2016-19 period.

Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

Metric	Florida	United States	Quintile
Bioscience Industry, 2018			
Bioscience Industry Employment	93,534	1,869,955	I
Bioscience Industry Location Quotient	0.82	n/a	III
Bioscience Industry Establishments	6,700	101,143	I
Academic Bioscience R&D Expenditures, FY 2018			
Academic Bioscience R&D (\$ thousands)	\$1,530,167	\$47,183,197	I
Bioscience Share of Total Academic R&D	62%	63%	III
Academic Bioscience R&D Per Capita	\$72	\$144	V
NIH Funding, FY 2019			
Funding (\$ thousands)	\$705,023	\$30,886,675	II
Funding Per Capita	\$33	\$94	IV
Bioscience Venture Capital Investments, 2016-19 (\$ millions)	\$1,279.54	\$102,728.33	II
Bioscience-Related Patents, 2016-19	5,459	108,438	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.

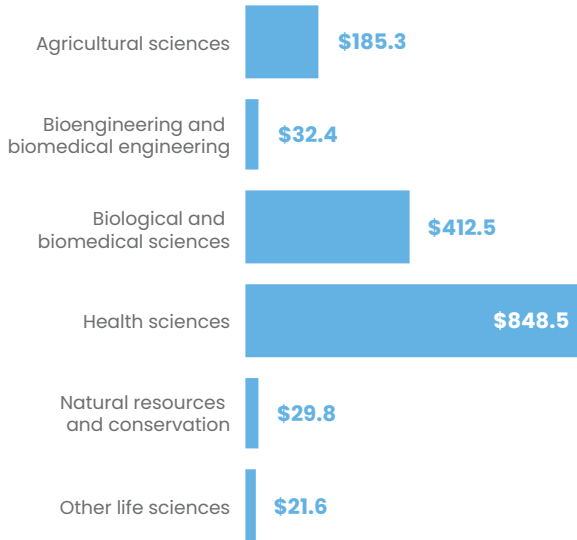
Industry Subsector	Florida		United States	
	2018	2016–2018 Change	2018	2016–2018 Change
Agricultural Feedstock and Industrial Biosciences				
Establishments	142	5.2%	1,785	4.4%
Employment	4,409	-3.3%	68,642	0.9%
Location Quotient	1.05		n/a	
Direct-Effect Employment Multiplier	5.33			
Total Employment Impact	23,508			
Average Annual Wage	\$80,328	1.9%	\$83,151	2.7%
Bioscience-Related Distribution				
Establishments	3,348	11.0%	51,582	31.8%
Employment	41,053	13.5%	545,055	16.1%
Location Quotient	1.24		n/a	
Direct-Effect Employment Multiplier	4.79			
Total Employment Impact	196,731			
Average Annual Wage	\$107,283	10.2%	\$105,905	13.1%
Drugs and Pharmaceuticals				
Establishments	354	22.1%	4,451	18.6%
Employment	6,611	15.2%	308,357	3.1%
Location Quotient	0.35		n/a	
Direct-Effect Employment Multiplier	5.98			
Total Employment Impact	39,552			
Average Annual Wage	\$75,641	1.7%	\$113,544	-0.2%
Medical Devices and Equipment				
Establishments	683	3.2%	8,753	8.3%
Employment	16,494	0.3%	378,431	5.3%
Location Quotient	0.71		n/a	
Direct-Effect Employment Multiplier	3.12			
Total Employment Impact	51,512			
Average Annual Wage	\$71,025	7.4%	\$90,541	6.8%
Research, Testing, and Medical Laboratories				
Establishments	2,173	3.8%	34,572	4.7%
Employment	24,968	3.3%	569,470	4.0%
Location Quotient	0.72		n/a	
Direct-Effect Employment Multiplier	2.60			
Total Employment Impact	64,906			
Average Annual Wage	\$81,570	8.6%	\$120,320	12.5%
Total Bioscience Industry				
Establishments	6,700	8.1%	101,143	18.0%
Employment	93,534	7.4%	1,869,955	7.2%
Location Quotient	0.82		n/a	
Direct-Effect Employment Multiplier	4.02			
Total Employment Impact	376,209			
Average Annual Wage	\$90,518	9.3%	\$107,610	8.7%
Total Private Sector				
Establishments	685,749	5.0%	9,776,674	3.1%
Employment	7,633,716	5.1%	125,195,944	3.3%
Average Annual Wage	\$49,438	6.7%	\$57,043	6.9%

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

Bioscience Research in Florida

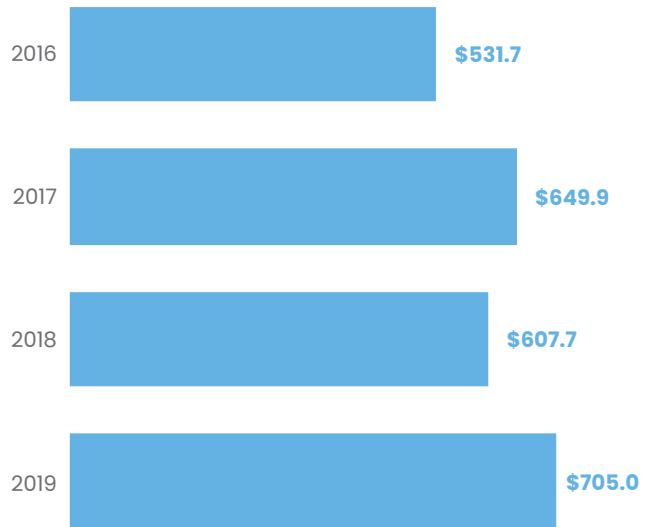
Bioscience Academic R&D Expenditures

\$ Millions, FY 2018



NIH Awards

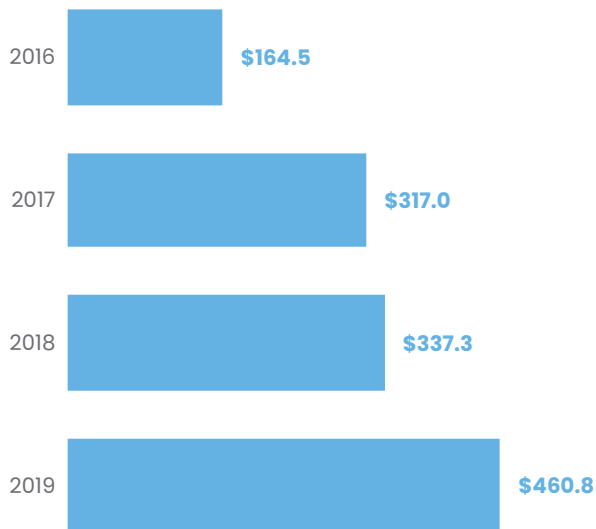
\$ Millions, FY 2016-2019



Bioscience Venture Capital in Florida

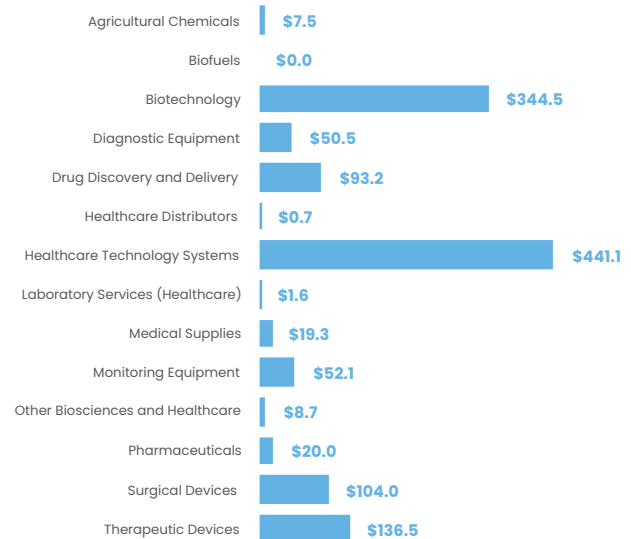
Bioscience-Related Venture Capital Investments

\$ Millions, 2016-2019



Bioscience-Related Venture Capital Investments by Segment

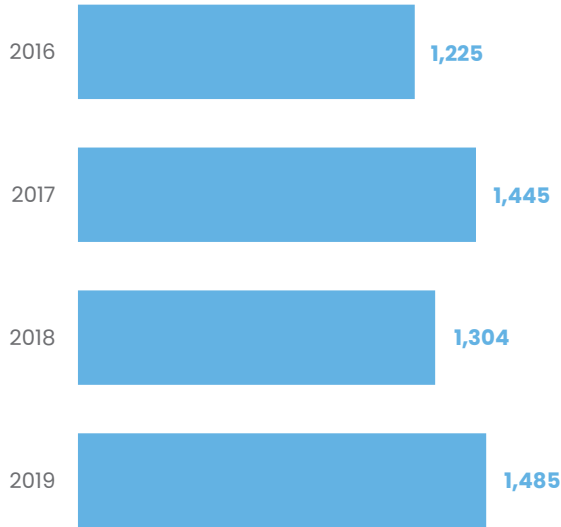
\$ Millions, 2016-2019



Bioscience Patents in Florida

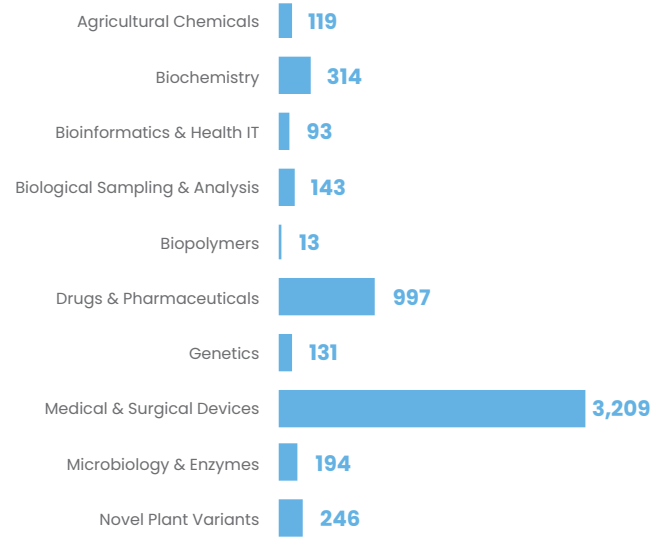
Bioscience-Related U.S. Patents

2016-2019



Bioscience-Related U.S. Patents by Segment

2016-2019



Source Notes

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

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

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.