

SOUTH CAROLINA

The largest bioscience subsector in South Carolina is medical devices and equipment (4,274 jobs in 2006); and the research, testing, and medical equipment laboratories subsector grew rapidly (61 percent) over the 6 years ending in 2006. Academic bioscience research expenditures totaled \$279 million in 2006, mainly in medical sciences and biological sciences. Funding from the National Institutes of Health was growing faster than nationally over the 6 years ending in 2006. The 390 bioscience patents issued over the past 6 years were well diversified across the surgical and medical instruments, drugs and pharmaceuticals, biochemistry, and other categories.

Major Industry Developments and Recent Successes

- **AmbioPharm** acquired a 20,000-square-foot facility in North Augusta where it will establish its headquarters and manufacture pharmaceutical-grade peptide intermediates.
- **Cooperative Diagnostics**, a developer of custom molecular diagnostic assays, announced in April 2008 that it will move from Pleasanton, California, to the South Carolina Biotechnology Incubation Facility in Greenwood.
- **Roche Carolina**, a process-development and manufacturing unit of Roche, announced in 2007 a \$60 million investment in Florence County, creating 20 jobs. The previous year, it invested \$15 million and created 10 jobs.

Recent State Initiatives

In 2006–2007, the **South Carolina Centers of Economic Excellence Program** added new university-based centers (and endowed faculty chairs) in several bioscience fields including health facilities design and testing, rehabilitation and reconstruction sciences, healthcare quality, tobacco-related malignancy research, and stroke. Each award carries \$5 million from State lottery funds, matched by private sources. The new centers join previous awards such as the multi-institutional **Brain Imaging Center**.

The Medical University of South Carolina and the University of South Carolina, along with partner Medical College of Georgia, established the **Southeastern Clinical and Translational Research Institute (SECTR)**, aimed at building a new model of translational research targeting underserved populations. In 2008, SECTR is making available \$1 million in institutional funds to assist both established and young faculty members in competing for major research funding from external sponsors.

In 2007, **SC Bio**, the business incubator program in Greenwood that is collocated with the Palmetto Biotechnology Alliance, opened regional offices in Columbia at the University of South Carolina and in Charleston at the Medical University of South Carolina.

For additional information on South Carolina's bioscience policies and programs, please see <http://www.scommerce.com>, <http://www.scbio.org>, and <http://www.palmettobio.org/>.

Bioscience Industry Base, 2006

Industry Subsector	South Carolina		United States	
	2006	2001-06 Change	2006	2001-06 Change
Agricultural Feedstock & Chemicals				
Establishments	35	7.8%	2,183	3.8%
Employment	1,294	-7.9%	105,846	-6.1%
Location Quotient	0.90		n.a.	
Direct-Effect Employment Multiplier	5.94		11.22	
Total Employment Impact	7,692		1,214,709	
Average Annual Wage	\$57,954		\$67,870	
Drugs & Pharmaceuticals				
Establishments	31	10.3%	2,654	1.9%
Employment	3,168	28.8%	317,149	4.0%
Location Quotient	0.74		n.a.	
Direct-Effect Employment Multiplier	3.78		9.92	
Total Employment Impact	11,969		2,880,242	
Average Annual Wage	\$48,403		\$86,892	
Medical Devices & Equipment				
Establishments	142	9.1%	15,215	0.3%
Employment	4,274	17.9%	422,993	-0.9%
Location Quotient	0.75		n.a.	
Direct-Effect Employment Multiplier	2.80		4.85	
Total Employment Impact	11,985		1,980,128	
Average Annual Wage	\$41,507		\$59,441	
Research, Testing, & Medical Laboratories				
Establishments	276	77.4%	22,857	32.7%
Employment	2,056	61.2%	449,991	17.8%
Location Quotient	0.34		n.a.	
Direct-Effect Employment Multiplier	2.18		3.25	
Total Employment Impact	4,479		1,440,500	
Average Annual Wage	\$49,023		\$71,284	
Total Private Sector				
Establishments	125,345	11.9%	8,575,730	10.2%
Employment	1,534,579	4.0%	113,463,842	3.1%
Average Annual Wage	\$33,736		\$42,272	

Note: n.a. = metric is not applicable.

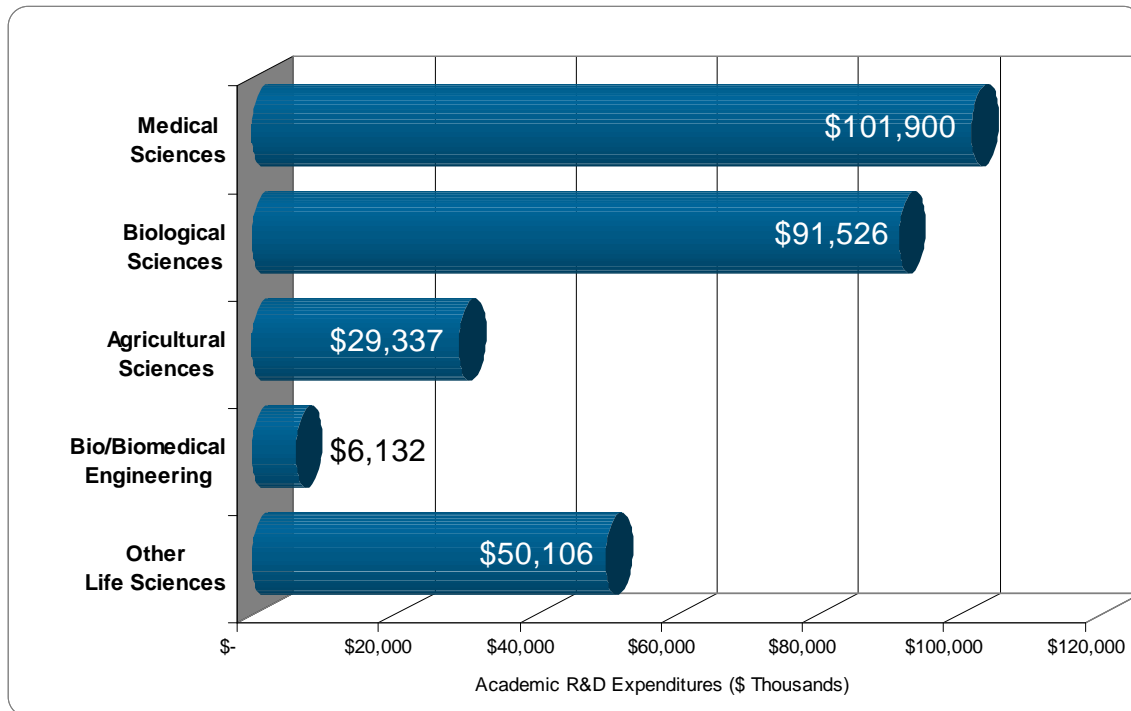
Additional Bioscience Performance Metrics

Summary of State Performance in Selected Bioscience-related Metrics

	South Carolina	United States	Rank
Academic R&D Expenditures, FY 2006			
Total (\$ thousands)	\$524,034	\$47,760,402	28
Bioscience R&D (\$ thousands)	\$279,001	\$29,307,628	29
Bioscience Share of Total R&D	53.2%	61.4%	
Bioscience R&D Per Capita	\$64.43	\$98.10	
Change in Bioscience R&D FY 2002–2006	27.9%	36.9%	
NIH Funding, FY 2007			
Total (\$ thousands)	\$127,836	\$21,066,389	32
Per Capita Funding	\$29.00	\$69.84	
Change in Funding, FY 2002–2007	22.7%	11.2%	
Higher Education Degrees in Bioscience Fields, AY 2006	1,899	143,433	25
Employment in Bioscience-related Occupations, 2006	5,280	588,520	33
Bioscience Venture Capital Investments, 2002-2007 (\$ millions)	\$0.0	\$51,260.9	47
Bioscience and Related Patents, 2002-2007	390	121,817	38

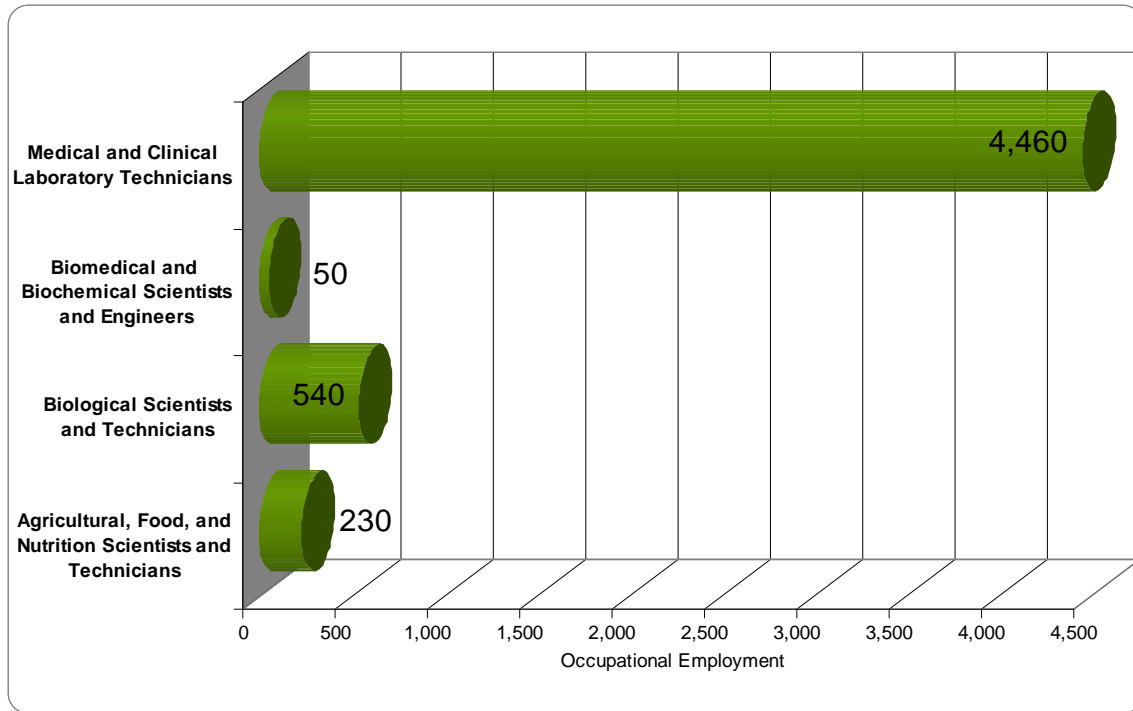
Bioscience R&D Base

Bioscience Academic R&D Expenditures in South Carolina, FY 2006

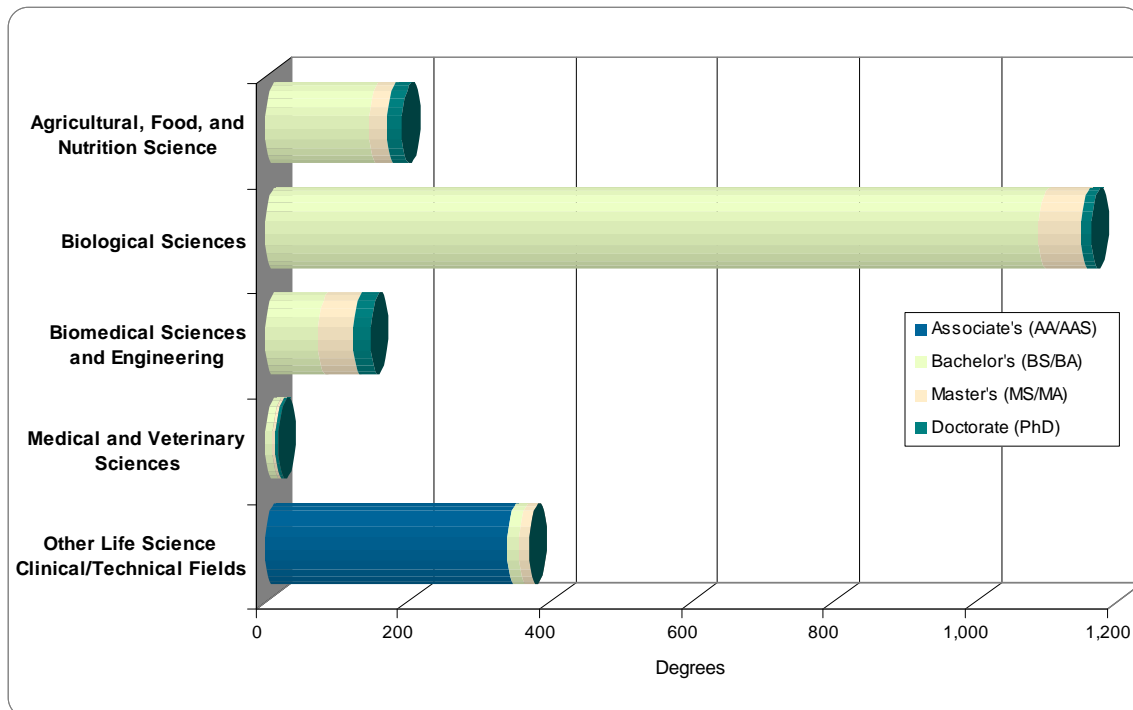


Bioscience Talent Base

Bioscience-related Occupational Employment in South Carolina, 2006

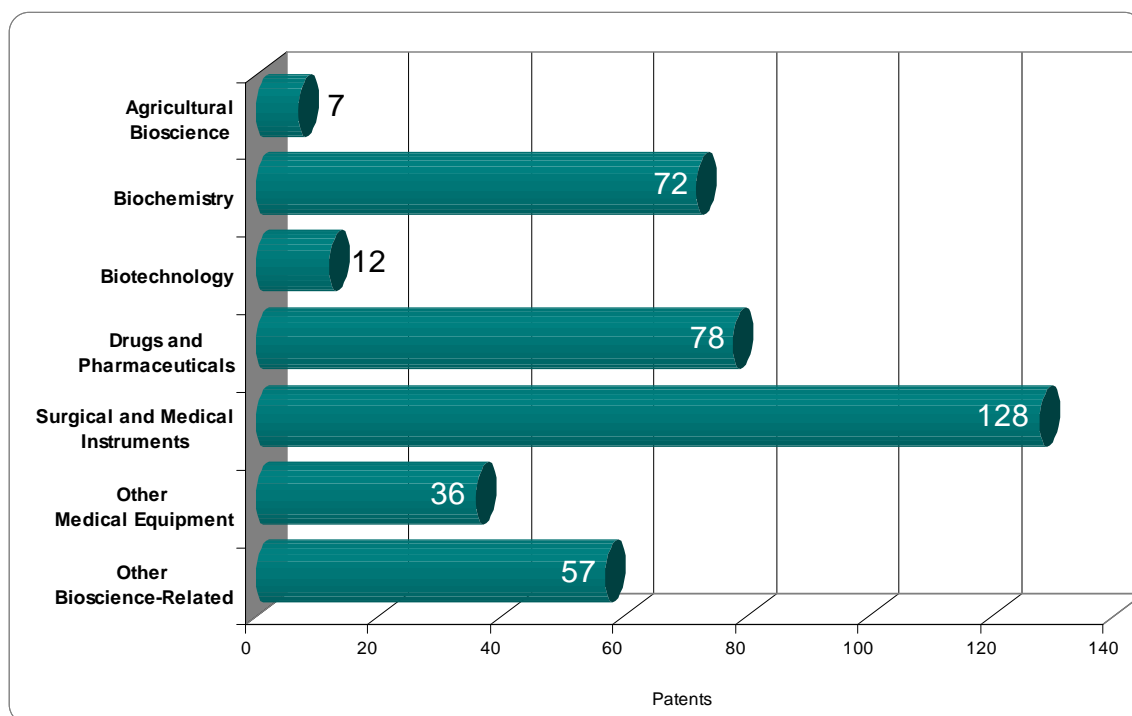


Bioscience-related Degrees in South Carolina, AY 2006



Bioscience Patents

Bioscience-related Patents by Classification Group in South Carolina, 2002–2007



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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 2006.

Employment Multipliers: U.S. Bureau of Economic Analysis RIMS II Employment Multipliers, 2005 (most currently available).

Academic R&D Expenditures: National Science Foundation (NSF) Survey of Research and Development Expenditures at Universities and Colleges, 2002 and 2006.

NIH Funding: National Institutes of Health – Office of Extramural Research, Award Trends – Dollars Awarded by State, 2002 and 2007.

Higher Education Degrees: National Center for Educational Statistics, Integrated Postsecondary Education Data System (IPEDS), 2006.

Occupational Employment: U.S. Bureau of Labor Statistics, Occupational Employment Statistics (OES) survey data, 2006.

Venture Capital: Thomson Reuters VentureExpert Database, 2002-2007, as of May 1, 2008.

Patents: U.S. Patent & Trademark Office data as available from the Thomson Reuters' Delphion Patent Analysis Database, 2002–2007, as of May 1, 2008.

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