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Ishwar Khatiwada
Northeastern University - Center for Labor Market Studies

Andrew Sum
Northeastern University - Center for Labor Market Studies

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Massachusetts' Competitive Ranking Among the 50 States with Respect to Employment, Payrolls, and Revenues for Biopharmaceutical Industries and Overall Competitiveness Factors

PhRMA Research Paper No. 4

Prepared by:
Ishwar Khatiwada
Andrew Sum
Center for Labor Market Studies
Northeastern University

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Introduction

Earlier research papers in our study of biopharmaceutical industries in Massachusetts have identified the levels of employment in these industries in Massachusetts, growth in employment in these industries over the past decade, the export-orientation of these industries in the Commonwealth, and compared Massachusetts' findings with those for the nation.[1] It is equally important to identify how well Massachusetts fares in comparison to all other states on an array of measures of the economic performance of biopharmaceutical industries and economic competitive factors that would be expected to influence the state's ability to attract and retain biopharmaceutical industries in the future.

This research paper is designed to provide answers to the following key research questions: Where does the Commonwealth rank in comparisons to all other states in securing and retaining biopharmaceutical jobs for its residents? How large is our state's biopharmaceutical industry jobs' share relative to those of other states? How large are biopharmaceutical industries' payrolls in Massachusetts compared to key competitor states? How does Massachusetts compare to other states in terms of the educational attainment of its resident workforce, its post-doctorate training of Ph.D. recipients in science and health fields, and its attraction of NIH funding. To answer these queries, we examined data on each of the following eight indicators under three broad topic areas: biopharmaceutical employment, biopharmaceutical payroll and revenue, and human capital competitiveness.

Biopharmaceutical Employment

1. Ranking of states by the absolute number of biopharmaceutical jobs in 2005,
2. Ranking of states by the biopharmaceutical industries share of total private sector wage and salary jobs in 2005,
3. Ranking of states by the number of biopharmaceutical jobs per 1,000 population,

[1] See: (i) Andrew Sum, Ishwar Khatiwada and Joseph McLaughlin, Employment Trends in Biopharmaceutical Industries in Massachusetts and the U.S., Research Brief # 1, report prepared for PhRMA Group, Center for Labor Market Studies, Northeastern University, December 2006.
(ii). Ishwar Khatiwada and Andrew, Export Orientation of Jobs in Biopharmaceutical Industries in Massachusetts and the U.S., Research Brief # 2, report Prepared for PhRMA Group, Center for Labor Market Studies, Northeastern University, December 2006.

Biopharmaceutical Payroll and Revenue

4. Ranking of states by annual aggregate payroll of biopharmaceutical industries,
5. Ranking of states by size of sales revenue in biopharmaceutical industries,

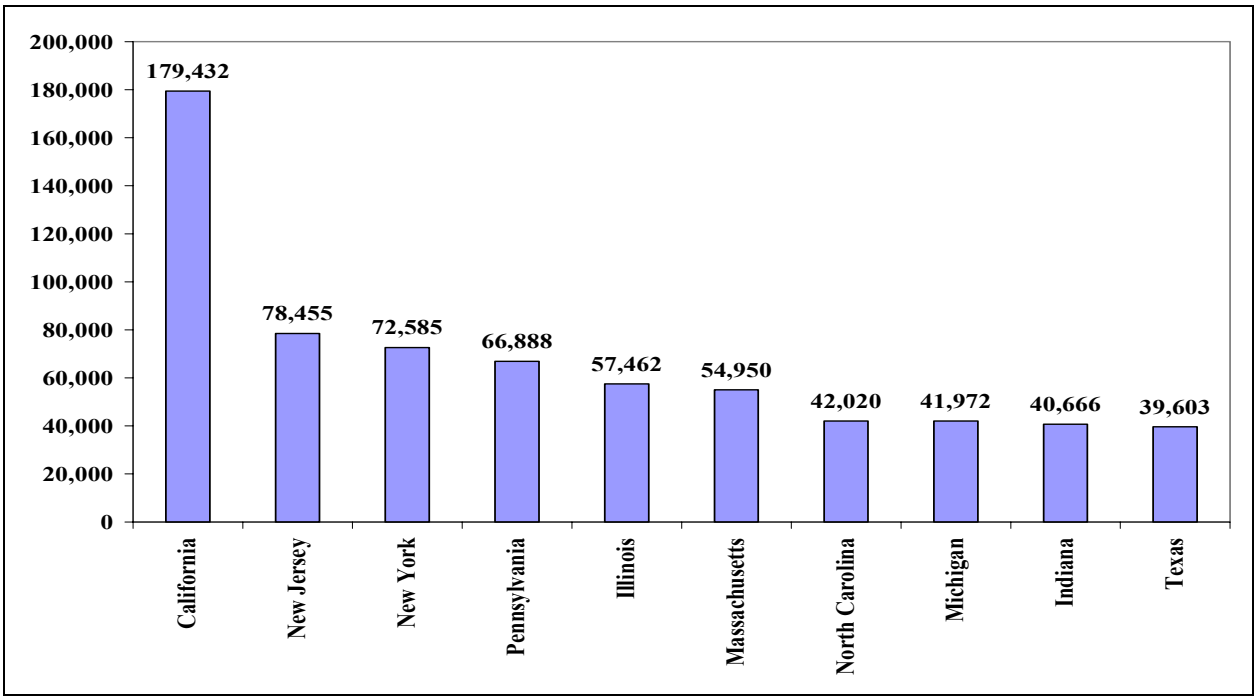
Human Capital Competitiveness

6. Educational attainment of the state's working-age population and its labor force and its rankings among the 50 states,
7. Ranking of States by the number of science and health post-doctorates who were enrolled in doctorate granting institutions,
8. Ranking of states by the level of their National Health Institutes funding,
9. Ranking of states by number of patents for invention awarded by the U.S. Patent and Trademark Office.

Biopharmaceutical Employment by State in 2005

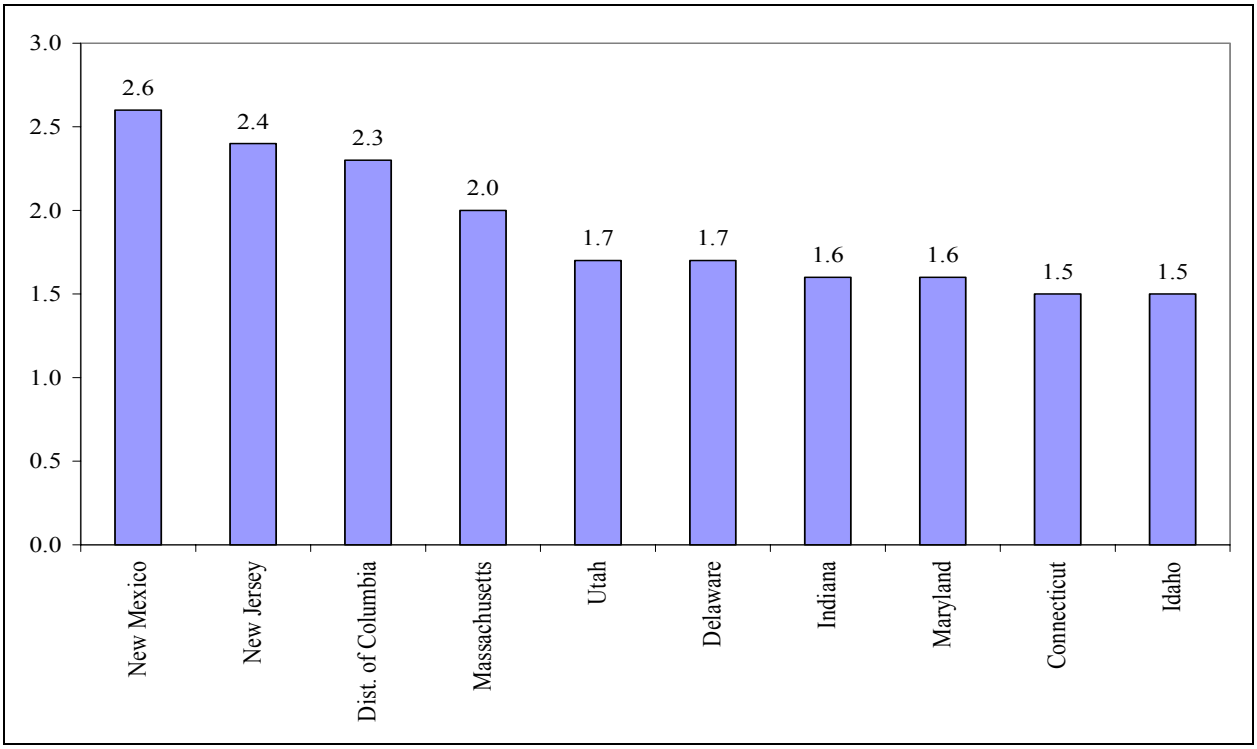
Based on the findings of the Quarterly Census of Employment and Wages (QCEW), nearly 55,000 wage and salary workers in Massachusetts were employed in biopharmaceutical industries in 2005. Among all 50 states and the District of Columbia, Massachusetts' ranking with respect to the absolute number of biopharmaceutical jobs was 6th highest in 2005. (Chart 1). The five states in 2005 with a higher number of wage and salary jobs in biopharmaceutical industries were California (179,432), New Jersey (78,455), New York (72,585), Pennsylvania (66,888) and Illinois (57,462). Massachusetts' ranking on this jobs measure in 2005 was the same as it was in 2001. Given its far greater size, the state of California clearly dominated Massachusetts in terms of the absolute number of biopharmaceutical jobs with the number of jobs being more than 3 times higher than in Massachusetts. As will be revealed below, however, Massachusetts outperforms California in terms of the share of jobs in biopharmaceutical industries. Among the three major biopharmaceutical industries, Massachusetts ranking in 2005 in terms of the absolute number of biopharmaceutical jobs was 11th highest in pharmaceutical and medicine manufacturing, 8th highest in medical equipment and supplies manufacturing, and second highest in physical, engineering and biological research service industry employment.

Chart 1:
Top 10 States with the Highest Number of Wage and Salary Biopharmaceutical Jobs in 2005



Since states vary considerably in the aggregate number of wage and salary jobs and residents, a more appropriate comparison would seem to be biopharmaceutical jobs as a percent of total jobs or persons. The number of biopharmaceutical industry jobs in Massachusetts accounted for approximately 2 percent of all private sector wage and salary jobs in 2005, and it ranked 4th highest among the 50 states in 2005 on this jobs measure. (Chart 2). The share of jobs generated by biopharmaceutical industries in Massachusetts rose from 1.8% in 2001 to 2.0% in 2005. New Mexico had the highest share of biopharmaceutical industry jobs (2.6%) followed by New Jersey (2.4%) and the District of Columbia (2.3%). Among the three major biopharmaceutical industries, Massachusetts ranking on this jobs measure was 11th highest in pharmaceutical and medicine manufacturing industries, 8th highest in medical instrument and supplies manufacturing, and 4th highest in physical, engineering and biological research service industries.

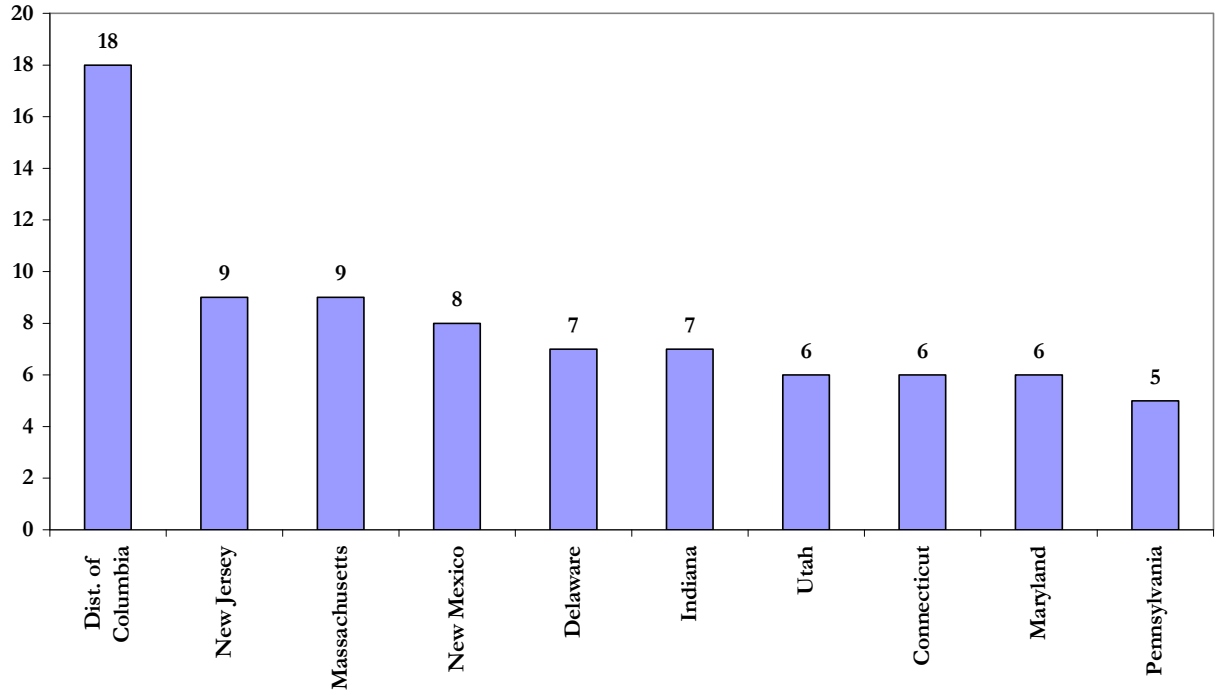
Chart 2:
Top 10 States Ranked by Biopharmaceutical Industry Share of
Total Private Sector Wage and Salary Jobs in 2005



We also estimated the number of biopharmaceutical industry jobs per 1,000 resident population for each state in 2005. Massachusetts had 9 biopharmaceutical jobs per 1,000 population, and the state ranked 2nd highest on this measure, tied with New Jersey. (Chart 3). The other three states with the highest number of biopharmaceutical jobs per 1,000 members of the state population were New Mexico (8), Delaware (5) and Indiana (6). Massachusetts' rank on this measure for pharmaceutical and medicine manufacturing was 9th highest with 1 pharmaceutical and medicine manufacturing job per 1,000 population. New Jersey was the leader on this measure, with 5 pharmaceutical and medicine manufacturing jobs per 1,000 population. In the medical instrument and supplies manufacturing industry, Massachusetts had 2 jobs per 1,000 population, and the state's ranking in 2005 was 7th highest. The top five states with the highest number of jobs in this industry per 1,000 population were Utah, Minnesota, Indiana, Nebraska, New Hampshire and Connecticut. Massachusetts was one of the two national leaders in the number of jobs per 1,000 population in physical, engineering and biological research

service industries. There were 5 of these jobs per 1,000 members of the population and the state ranked 2nd highest, exceeded only by New Mexico.

Chart 3:
Biopharmaceutical Industry Jobs Per 1,000 Resident Population in the Top 10 States in 2005

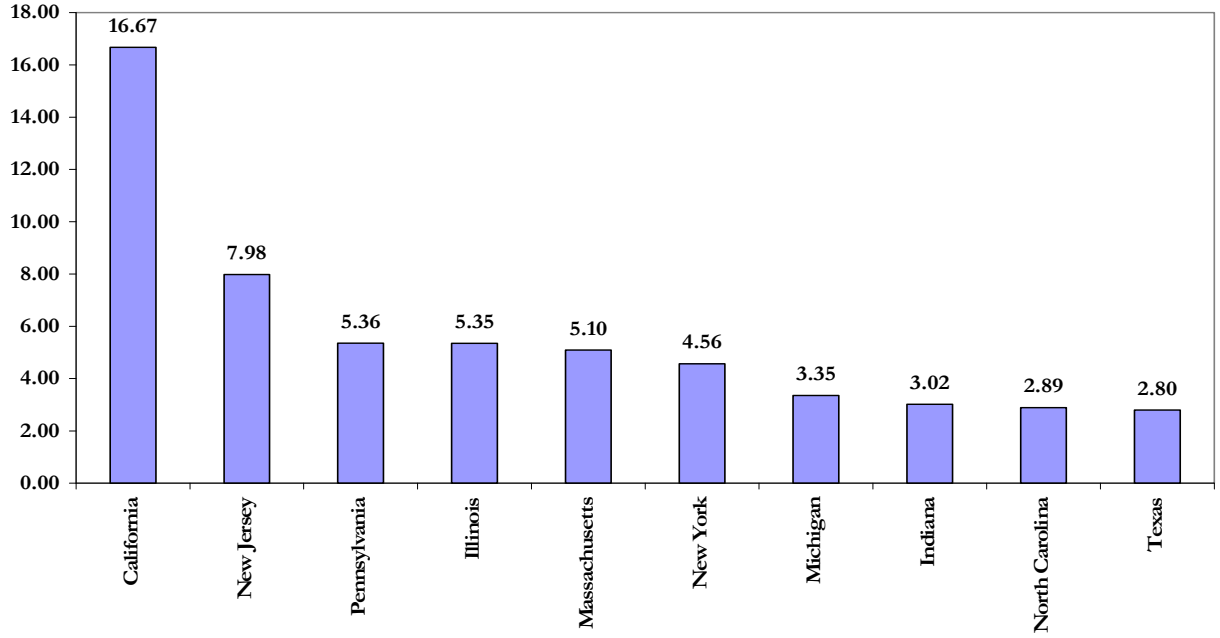


Payroll and Revenue Measures of Performance in Biopharmaceutical Industries

Another important measure of an industry's contribution to the state's economy is the size of its annual payroll. The QCEW data on wage and salary payments below represents aggregate payroll for wage and salary workers on the formal payrolls of the firms. The annual payroll of $5.10 billion in 2005 in biopharmaceutical industries in Massachusetts was the 5th highest among the 50 states and the District of Columbia. On this measure, Massachusetts was only outpaced by California ($16.7 billion), New Jersey ($5.4 billion), Pennsylvania ($5.4 billion) and Illinois $5.3 billion).The high payroll per worker is also important since it will be a main determinant of the multiplier impacts of the industry by generating spending on goods local goods and service. Within the three major biopharmaceutical industries, Massachusetts' payroll ranking was 10th highest in pharmaceutical and medicine manufacturing, 8th highest in medical

equipment and supplies manufacturing, and 2nd highest in physical, engineering and biological research service industries. (Chart 4).

Chart 4:
Ten States With the Largest Annual Payrolls in Biopharmaceutical Industries, 2005
(In Billions of Dollars)



The U.S. Census Bureau's Economic Census, which is conducted every five years, collects information on a company's annual aggregate sales/revenues/receipts.[1] The availability of these sales/revenues/receipts data allow us to compare the sales generating performance of biopharmaceutical industries across states. In Massachusetts, the annual aggregate revenues of all biopharmaceutical industries in 2002 was $11.2 billion, accounting for 4.3 percent of total sales in all biopharmaceutical industries in the entire U.S. economy. Among the 32 states for which data on sales for biopharmaceutical industries were comparable, Massachusetts' ranking was 8th highest on this measure. The seven states in 2002 with the highest sales revenues in biopharmaceutical industries were California ($37.2 billion), Pennsylvania ($28 billion), New York ($22.1 billion), North Carolina ($19.6 billion), New Jersey ($19.56 billion), Indiana ($14.5 billion) and Illinois ($11.7 billion). The state's ranking on this revenue measure varied across the

[1] The latest Economic Census was conducted by the U.S. Census Bureau in 2002.

three biopharmaceutical industries. Massachusetts' ranking on this revenue measure for the pharmaceutical and medicine manufacturing industry was 10th highest among the states, with sales of $3.63 billion. The Commonwealth's ranking among the states on this sales revenue measure was 6th highest for the medical instrument and supplies manufacturing industries, with sales of $3.07 billion. However, Massachusetts ranked among the top three states in terms of sales revenues/receipts generated by the physical, biological, and engineering research and development services industry. Only California and Virginia in 2002 had annual sales revenues higher than that of Massachusetts. During that year, this research and development services industry in Massachusetts generated $4.49 billion of sales revenues, accounting for 7.4% of the total revenue generated by these industries in the entire U.S. economy.

The Human Capital Competitiveness of Massachusetts

The economic competitiveness of Massachusetts in attracting and retaining biopharmaceutical industries is linked to the human capital characteristics of its labor force, the state's ability to develop high level talent in science and health research fields, and its success in attracting research funding in medicine and scientific research. We will begin our assessment with an overview of the educational backgrounds of the state's working-age population and its labor force.

The aggregate size of the resident civilian labor force of a state and its average quality will be influenced by the formal educational attainment and literacy/numeracy proficiency of its working-age adults. National, state, and local research has consistently shown that the formal educational attainment and literacy/numeracy proficiencies of adults have strong positive, independent impacts on their labor force participation behavior, their ability to obtain paid employment when they seek to work, and their annual hours of work.[3] The formal educational attainment and the occupational skills of workers in state and local economies also have been found to influence the level of aggregate real output (Gross State Product), labor productivity,

[3] See: (i) Richard J. Murnane and Frank Levy, Teaching the New Basic Skills, The Free Press, New York, 1996; (ii) Andrew Sum, Literacy and the Labor Force, National Center for Education Statistics, Washington, D.C, 1999; (iii) Andrew Sum, Irwin Kirsch, and Kentaro Yamomoto, Pathways to Labor Market Success: The Literacy Proficiency of U.S. Adults, Policy Information Center, Educational Testing Service, Princeton, 2004. (iv) Andrew Sum, Ishwar Khatiwada, et al., Mass Economy: the Labor Supply and Our Economic Future, Massachusetts Institute for A New Commonwealth, Boston, 2006.

and the growth rates of real output, real income per capita, and real earnings of resident workers.[4]

Given its lower abundance of natural resources and its entrepreneurial prowess, Massachusetts has been more dependent on the human capital of its workforce to achieve economic growth than most other states, and the educational skills and quality of its workforce have frequently ranked very high among the states.[5] To identify the educational attainment of the state's working-age population (16 and older) and its civilian labor force in recent years and to place those findings in comparative perspective, we examined the findings of the 2003 American Community Surveys and the 2005 Monthly Current Population Surveys for Massachusetts, U.S. and all other states. Key findings of our analysis are displayed in Tables 1 through 4. During 2003, Massachusetts had a below average share of its working-age population (16 and older) that were either high school dropouts or high school graduates with no post-secondary schooling (Table 1). Massachusetts also had a lower share of its working-age population completing 1 to 3 years of college in 2003 than the nation as a whole (24.6% vs. 27.4%). At the upper end of the educational attainment distribution, however, Massachusetts had an above average share of its residents with a Bachelor's degree (nearly 20 percent vs. 15 percent for the nation) and a Master's or higher degree (13 vs. 8 percent). Approximately 1 of every 3 Massachusetts residents of working-age held a Bachelor's or higher degree in 2003 versus only 23 percent of U.S. residents. Massachusetts ranked very high among the 50 states on the following three measures of educational attainment: 3rd highest on the share of its working-age population with one or more years of post-secondary schooling, highest on the share of its population with at least a Bachelor's degree, and highest on the share of its working-age population with a Master's or higher degree (Table 2). Massachusetts in 2005 ranked first among the 50 states with respect to the share of its working-age population with four-year or higher college degrees. Findings of our analysis of the 2005 monthly CPS household survey data yielded very similar findings. Thirty-

[4] For findings on the impact of the schooling and occupational skills of a state's and metropolitan area's workforce on its aggregate output level, real income per capita, and labor productivity,
See: (i) Andrew Sum, Donna Desrochers, and Neal Fogg, Modeling State GSP Performance: An Aggregate Production Function Approach, Paper Presented to the Eastern Economic Association, Boston, March 1996; (ii) Randall W. Eberts, George Erickcek, and Jack Kleinhenz, "Development of a Regional Economic Dashboard," Upjohn Institute for Employment Research, Kalamazoo, July 2006.

[5] See: (i) John D. Donohue, Lisa M. Lynch, Ralph Whitehead, Opportunity Knocks: Training the Commonwealth's Workers for the New Economy, Mellon New England and the Massachusetts Institute for a New Commonwealth, Boston, 2000; (ii) Robert B. Atkinson, et. al., The State New Economy Index, Progressive Policy Institute, July 1999.

four percent of the state's working age residents reported holding a Bachelor's or higher degree versus only 25% for the U.S. Massachusetts again ranked first among the 50 states in 2005 on this key educational attainment measure.

Table 1:
The Percent Distribution of the Working-Age Population (16+) of Massachusetts and the U.S., 2003

Educational Attainment	(A) U.S.	(B) Massachusetts	(C) Massachusetts – U.S.
<12 or 12, no diploma / GED[1]	19.8	15.1	-4.7
H.S. diploma / GED	29.3	27.4	-1.9
13 – 15 years	27.4	24.6	-2.8
Bachelor's degree	15.2	19.5	+4.3
Master's or higher	8.2	13.4	+5.2

Source: 2003 American Community Surveys, public use files, tabulations by authors.
Note: [1] This educational attainment group includes students 16 and older who are still enrolled in high school.

Table 2:
Massachusetts' Rankings Among the 50 States with Respect to the Share of Its Working-Age Population in Selected Educational Attainment Groups, 2003

Educational Attainment	(A) Percent of Population	(B) Massachusetts Ranking Among the 50 States
13 or more years	57.5	Tied 3rd (Minnesota)
Bachelor's or higher degree	32.9	1st
Master's or higher degree	13.4	1st

Source: 2003 American Community Surveys, public use files, tabulations by authors.

The 2003 ACS surveys also collected information on the labor force status of all working-age respondents at the time of the survey. The educational attainment backgrounds of all civilian labor force participants in Massachusetts, the U.S., and all other 49 states were examined (Table 3 and 4). Similar to our previous findings for the working-age population, Massachusetts had a below average share of its labor force in the three following educational attainment subgroups: those lacking a high school diploma/GED certificate, those with a high school diploma but no completed years of post-secondary schooling, and those with one to three years of college, including Associate degrees holders. The state had a considerably higher share

of its resident labor force with a Bachelor's or higher degree. Nearly 39 of every 100 civilian labor force participants in the state held a Bachelor's or higher degree versus slightly under 28 percent in the nation. (Table 3). The state ranked highest among the 50 states on this educational attainment measure.[6] Approximately 16 percent of the resident labor force participants in our state in 2003 held a Master's or higher degree versus less than 10 percent of the U.S. labor force. Massachusetts ranked first among the 50 states on this measure of human capital in 2003. On each of the three human capital measures representing the post-secondary educational characteristics of the members of the resident labor force in 2003, Massachusetts also ranked first among the 50 states. (Table 4). This represents a major accomplishment for our state. However, our state did not rank among the very highest in the labor force participation rates of residents in each of these educational attainment subgroups. There is considerable room for improving the labor force attachment of most educational subgroups of the state's working-age population.

Table 3:
The Percent Distribution of the U.S. and Massachusetts
Civilian Labor Force by Educational Attainment, 2003

	(A)	(B)	(C)
Educational Attainment	U.S.	Massachusetts	Massachusetts – U.S.
<12 or 12, no diploma / GED	13.6	9.5	-4.1
H.S. diploma / GED	28.7	25.6	-3.1
13 – 15 years	30.1	26.3	-3.8
Bachelor's degree	17.9	22.7	+4.8
Master's or higher	9.7	15.9	+6.2

Source: 2003 monthly CPS surveys, public use files, tabulations by authors.

[6] The District of Columbia actually ranked highest on this measure with 48% of its 2003 labor force holding a Bachelor's or higher degree; however, DC adults with 12 or fewer years of schooling had very low rates of labor force attachment in 2003, artificially raising the share of its labor force with a Bachelor's or higher degree.

Table 4:
Massachusetts' Rankings Among the 50 States with Respect to the
Share of Its Civilian Labor Force in Selected Educational Attainment Groups, 2003

Educational Attainment	(A) Percent of Population	(B) Massachusetts Ranking Among 50 States
13 or more years	64.9	Tied 1st (Washington)
Bachelor's or higher degree	38.6	1st
Master's or higher degree	15.9	1st

Source: 2003 American Community Surveys, public use files, tabulations by authors.

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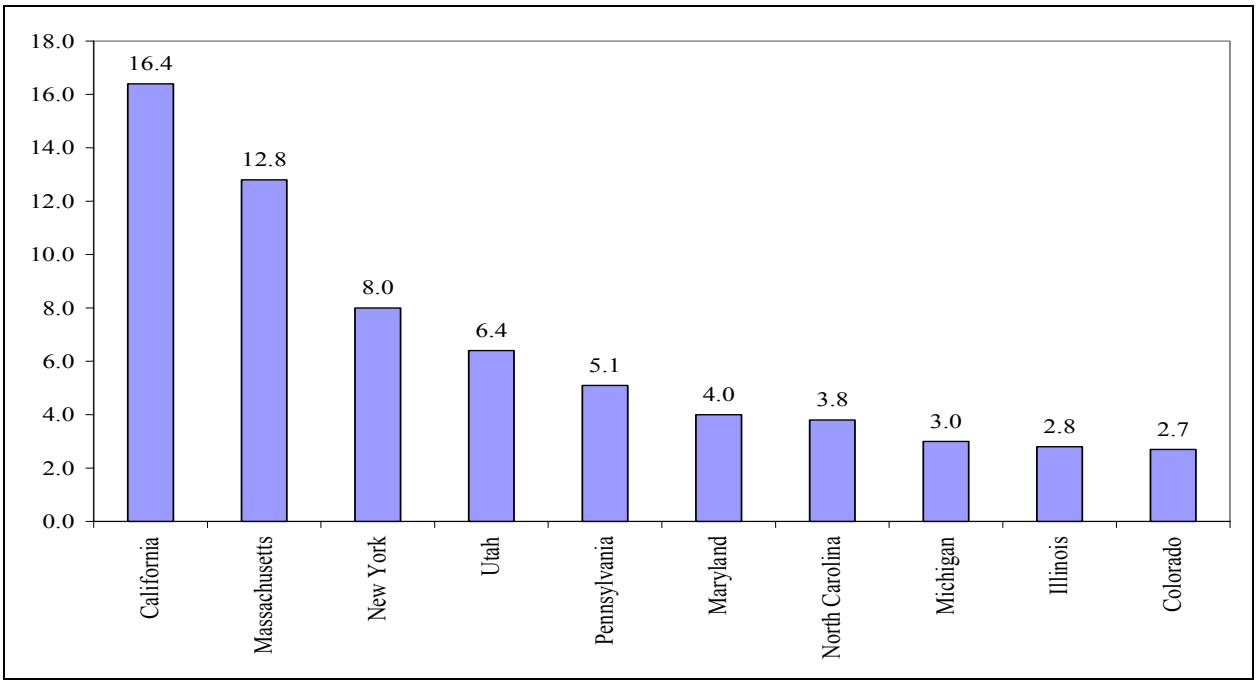
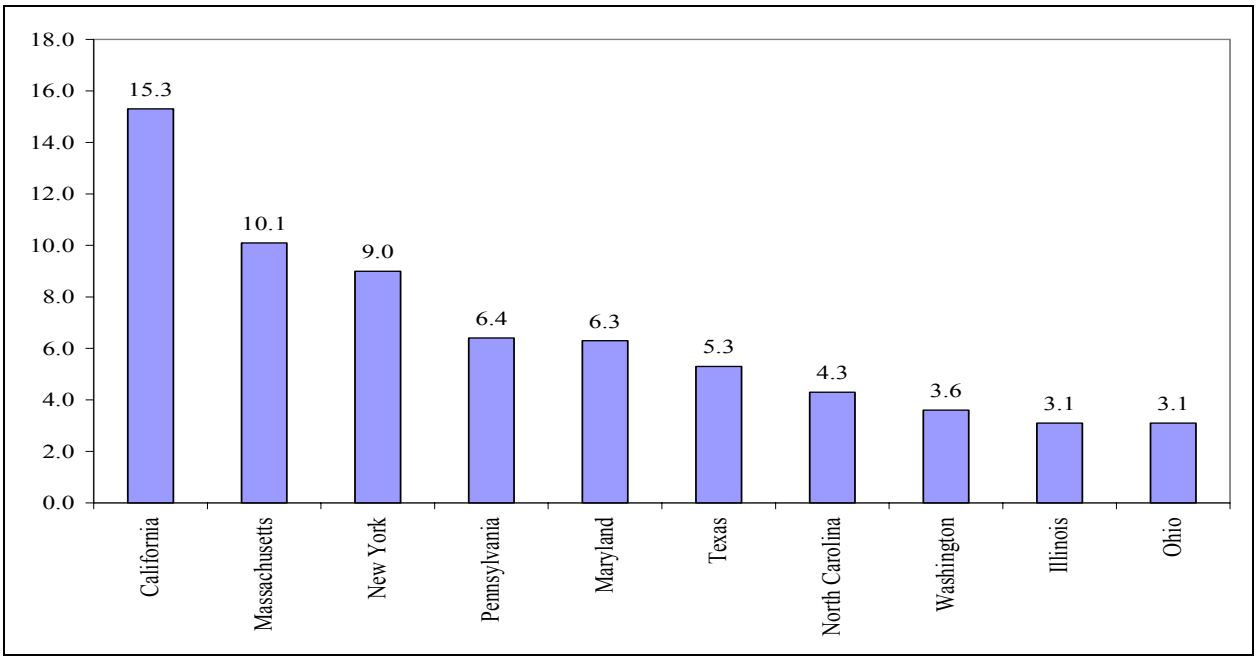
One of the key reasons that biopharmaceutical industries choose to locate in Massachusetts is the continuous ability of the state's top ranked educational institutions to produce a large pool of professional or doctorate graduates that can fill science, engineering and health post doctorate positions. Data on the number of such post-doctorates in Massachusetts and other states was obtained from the National Science Foundation (NSF). In 2003, a total of 5,986 science, engineering and health post-doctorate graduates were enrolled in doctorate granting institutions in Massachusetts, accounting for nearly 13 percent of all such graduates in the nation during that year. Massachusetts' share of the post-doctorates' in these fields ranked second highest, exceeded only by California on this measure. (Chart 5).

Chart 5:
Share of Post-Doctorates Enrolled in Doctorate Granting Institutions in Top 10 States, 2003



Another measure of economic competitiveness is a state's ability to attract national research monies in the research field. Massachusetts obtains a large chunk of National Institute of Health (NIH) funding grants for research and development. These grants include research grants, training grants, fellowship grants, R&D contracts, and other grants. Between 2000 and 2005, Massachusetts obtained a total of $11.8 billion dollars in such grants. In 2005, the value of these grants from NIH to Massachusetts was $2.27 billion, accounting for 9.8% of all total grants disbursed by the NIH across the country. Massachusetts' ranking was second highest among the 50 states on this measure. Only California obtained a level of NIH grants that was higher than Massachusetts' NIH grants. In per worker or per capita terms, Massachusetts substantially outperformed the other states across the nation. (Chart 6).

Chart 6:
Top Ten States with the Largest Percentage Share of NIH Grants Obtained Between 2000-2005



The U.S. Patent and Trademark Office (USPTO) keeps records of patents for inventions that were granted during a calendar year for each state. The patents data are classified under the U.S. Patent Classification Systems (USPCS), which according to USPTO contains 470 total classes and 155,000 total subclasses. Data from USPTO can be analyzed to identify the states that generate new inventions from their R&D sector. It can be reasonably hypothesized that states with relatively higher human capital endowments combined with a supportive infrastructure will spew forth a larger number of inventions.

How has Massachusetts fared in comparisons to other states in obtaining patents for inventions? Of all awarded patents for inventions, what share of patents for inventions were from biopharmaceutical industries? To answer these question, we aggregated 12 categories of patents invention data for each state that closely matched with the products of our biopharmaceutical industries. Table 5 displays our definition of biopharmaceutical industries' patents.

Table 5:
CLMS Listing of Biopharmaceutical Industries' Products Patents Classification

1. Class 128 - Surgery
2. Class 422- Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing
3. Class 424 - Drug, Bio-Affecting and Body Treating Compositions (includes Class 514)
4. Class 430- Radiation Imagery Chemistry: Process, Composition, or Product Thereof
5. Class 435- Chemistry: Molecular Biology and Microbiology
6. Class 436- Chemistry: Analytical and Immunological Testing
7. Class 601- Surgery: Kinesitherapy
8. Class 602- Surgery: Splint, Brace, or Bandage
9. Class 604- Surgery (Medicators and Receptors)
10. Class 606- Surgery (instruments)
11. Class 607- Surgery: Light, Thermal, and Electrical Application
12. Class 623- Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefore

Source: The U.S. Patent and Trademark Office, authors' classifications for Biopharmaceutical industries.

Massachusetts obtained a total of 17,970 patents between 2001 and 2005, ranking 5th highest among all 50 states and the District of Columbia. Of these total invention patents, 4,483 were biopharmaceutical industries' patents, accounting for 8 percent of all invention patents obtained in the state during the 2001-2005 period. (Table 6). California had the highest share of biopharmaceutical industries' patents (25.4%) followed by Massachusetts (7.9%), New York (6.6%), New Jersey (5.7%) and Minnesota (5.3%).

Table 6:
Top Ten States with the Highest National Share of Invention Patents Obtained in Biopharmaceutical Industries, 2001-2005

Rank	State	Biopharmaceutical Industries' Patents	Percent Share of All Such Patents
1	California	14,474	25.4%
2	Massachusetts	4,483	7.9%
3	New York	3,781	6.6%
4	New Jersey	3,230	5.7%
5	Minnesota	3,045	5.3%
6	Pennsylvania	2,891	5.1%
7	Maryland	2,124	3.7%
8	Texas	2,001	3.5%
9	Florida	1,779	3.1%
10	Ohio	1,647	2.9%
	All 50 States and the D.C.	56,840	100.0%

Source: The U.S. Patent and Trademark Office, author tabulations.

The total number of invention patents awarded over the 2001-2005 period was 421,254. Patents in biopharmaceutical industries accounted for 56,840 or 13% of all such patents. The share of state's patents that were biopharmaceutical related varied considerably by state, with Massachusetts being a national leader in this area. (Table 7). One quarter of Massachusetts' total invention patents were in the biopharmaceutical industries' category. Massachusetts ranked second highest on this measure. Only the state of Maryland had a share of invention patents in the biopharmaceutical industries that was higher than Massachusetts share (31% versus 25%).

Table 7:
Top Ten States with the Highest National Share of Invention Patents
Obtained in Biopharmaceutical Industries, 2001-2005

Rank	State	All Invention Patents	Biopharmaceutical Industries' Patents	Biopharmaceutical Patents as a % of All Patents
1	Maryland	6,900	2,124	30.8
2	**Massachusetts**	**17,970**	**4,483**	**24.9**
3	Minnesota	13,524	3,045	22.5
4	Dist of Columbia	307	69	22.5
5	Missouri	3,899	771	19.8
6	New Jersey	16,669	3,230	19.4
7	Delaware	1,740	337	19.4
8	Pennsylvania	15,239	2,891	19.0
9	Utah	3,265	601	18.4
10	Connecticut	8,420	1,531	18.2
	All 50 States and the D.C	421,254	56,840	13.5

Source: The U.S. Patent and Trademark Office, author tabulations.

Appendix: Tables on States Ranking of Employment, Payrolls, and Revenues and Overall Competitiveness Factors

U.S. States Ranking of Wage and Salary Bio-Pharmaceutical-Related Jobs in 2005

	State	2005
1	California	179,432
2	New Jersey	78,455
3	New York	72,585
4	Pennsylvania	66,888
5	Illinois	57,462
6	Massachusetts	54,950
7	North Carolina	42,020
8	Michigan	41,972
9	Indiana	40,666
10	Texas	39,603
11	Florida	34,940
12	Maryland	33,184
13	Ohio	29,952
14	Virginia	28,845
15	Minnesota	23,708
16	Washington	22,809
17	Connecticut	21,454
18	Colorado	21,032
19	Tennessee	18,699
20	Missouri	18,435
21	Utah	15,894
22	New Mexico	15,274
23	Georgia	13,682
24	Wisconsin	11,974
25	District of Columbia	9,986
26	South Carolina	7,857
27	Idaho	7,625
28	Arizona	7,487
29	Alabama	7,469
30	Nebraska	7,207
31	Oregon	6,894
32	Nevada	6,468
33	Delaware	6,069
34	Iowa	5,488
35	New Hampshire	4,664
36	Kentucky	4,522
37	Kansas	4,306
38	Maine	3,820
39	Arkansas	3,722
40	Oklahoma	3,551
41	Rhode Island	3,546
42	Mississippi	2,439
43	West Virginia	1,970
44	Hawaii	1,946
45	Louisiana	1,773
46	South Dakota	1,518
47	Montana	1,064
48	Vermont	873
49	North Dakota	637
50	Alaska	517
51	Wyoming	231

U.S. States Ranking of Bio-Pharma-Related Industry Share of Total Private Sector Wage and Salary Jobs in 2005

	State	2005
1	New Mexico	2.6
2	New Jersey	2.4
3	District of Columbia	2.3
4	Massachusetts	2.0
5	Utah	1.7
6	Delaware	1.7
7	Indiana	1.6
8	Maryland	1.6
9	Connecticut	1.5
10	Idaho	1.5
11	California	1.4
12	Pennsylvania	1.4
13	North Carolina	1.3
14	Illinois	1.2
15	Michigan	1.1
16	Colorado	1.1
17	New York	1.0
18	Minnesota	1.0
19	Washington	1.0
20	Virginia	1.0
21	Nebraska	1.0
22	New Hampshire	0.9
23	Rhode Island	0.9
24	Missouri	0.8
25	Tennessee	0.8
26	Maine	0.8
27	Ohio	0.7
28	Nevada	0.6
29	South Carolina	0.5
30	Florida	0.5
31	Wisconsin	0.5
32	Texas	0.5
33	Oregon	0.5
34	South Dakota	0.5
35	Alabama	0.5
36	Iowa	0.5
37	Georgia	0.4
38	Kansas	0.4
39	Hawaii	0.4
40	Arkansas	0.4
41	Arizona	0.4
42	West Virginia	0.4
43	Vermont	0.3
44	Montana	0.3
45	Kentucky	0.3
46	Oklahoma	0.3
47	Mississippi	0.3
48	North Dakota	0.2
49	Alaska	0.2
50	Louisiana	0.1
51	Wyoming	0.1

U.S. States Ranking of Biopharmaceutical-Related Industry Jobs Per 1,000 Resident Populaiton in 2005

Rank	State	Jobs Per 1000 Resident Population
1	Dist of Columbia	18
2	New Jersey	9
3	Massachusetts	9
4	New Mexico	8
5	Delaware	7
6	Indiana	6
7	Utah	6
8	Connecticut	6
9	Maryland	6
10	Pennsylvania	5
11	Idaho	5
12	California	5
13	North Carolina	5
14	Minnesota	5
15	Colorado	5
16	Illinois	5
17	Michigan	4
18	Nebraska	4
19	Virginia	4
20	New York	4
21	Washington	4
22	New Hampshire	4
23	Rhode Island	3
24	Missouri	3
25	Tennessee	3
26	Maine	3
27	Nevada	3
28	Ohio	3
29	Wisconsin	2
30	Florida	2
31	South Dakota	2
32	Oregon	2
33	Iowa	2
34	South	2
35	Texas	2
36	Alabama	2
37	Kansas	2
38	Hawaii	2
39	Georgia	2
40	Vermont	1
41	Arkansas	1
42	Arizona	1
43	Montana	1
44	West Virginia	1
45	Kentucky	1
46	Oklahoma	1
47	North Dakota	1
48	Mississippi	1
49	Alaska	1
50	Wyoming	0
51	Louisiana	0

U.S. States Ranking of Annual Average Payrolls in Biopharmaceutical Industries in 2005 (In Billions of Dollars)

Rank	State	Payroll
1	California	16.67
2	New Jersey	7.98
3	Pennsylvania	5.36
4	Illinois	5.35
5	Massachusetts	5.10
6	New York	4.56
7	Michigan	3.35
8	Indiana	3.02
9	North Carolina	2.89
10	Texas	2.80
11	Maryland	2.49
12	Virginia	2.25
13	Florida	1.90
14	Connecticut	1.88
15	Ohio	1.79
16	Washington	1.69
17	Colorado	1.66
18	Minnesota	1.52
19	Missouri	1.37
20	Tennessee	1.14
21	New Mexico	1.05
22	Georgia	0.82
23	District of Columbia	0.77
24	Utah	0.76
25	Wisconsin	0.66
26	Delaware	0.54
27	Idaho	0.48
28	Nevada	0.48
29	Arizona	0.42
30	Alabama	0.42
31	South Carolina	0.35
32	Oregon	0.34
33	Nebraska	0.33
34	New Hampshire	0.27
35	Iowa	0.25
36	Rhode Island	0.23
37	Kentucky	0.23
38	Kansas	0.20
39	Maine	0.18
40	Oklahoma	0.16
41	Arkansas	0.13
42	Hawaii	0.13
43	Mississippi	0.09
44	West Virginia	0.09
45	South Dakota	0.08
46	Louisiana	0.07
47	Montana	0.05
48	Vermont	0.04
49	Alaska	0.02
50	North Dakota	0.02
51	Wyoming	0.01

U.S. States Ranking of Wage and Salary Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171) Jobs in 2005

	State	2005
1	California	89,927
2	Massachusetts	35,192
3	New York	34,730
4	Pennsylvania	27,529
5	Illinois	26,416
6	New Jersey	26,344
7	Maryland	25,539
8	Michigan	22,975
9	Virginia	22,023
10	Texas	17,919
11	Washington	17,422
12	North Carolina	13,869
13	New Mexico	13,719
14	Ohio	13,449
15	Colorado	12,557
16	Florida	10,754
17	District of Columbia	9,845
18	Tennessee	9,426
19	Missouri	8,525
20	Idaho	6,682
21	Minnesota	6,385
22	Nevada	5,119
23	Connecticut	4,738
24	Delaware	4,504
25	Alabama	4,196
26	Indiana	3,990
27	Utah	3,679
28	Georgia	3,572
29	Wisconsin	3,136
30	Arizona	2,880
31	Oregon	2,708
32	Oklahoma	1,967
33	Maine	1,672
34	Hawaii	1,650
35	Nebraska	1,528
36	South Carolina	1,310
37	New Hampshire	1,306
38	Kentucky	1,217
39	West Virginia	1,159
40	Iowa	1,094
41	Arkansas	1,024
42	Kansas	892
43	Rhode Island	701
44	Louisiana	669
45	Montana	619
46	Alaska	445
47	North Dakota	444
48	Mississippi	437
49	Vermont	335
50	South Dakota	166
51	Wyoming	148

U.S. States Ranking of Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171) Industry Share of Total Private Sector Wage and Salary Jobs in 2005

	State	2005
1	New Mexico	2.3
2	District of Columbia	2.3
3	Idaho	1.3
4	Massachusetts	1.3
5	Delaware	1.2
6	Maryland	1.2
7	New Jersey	0.8
8	Washington	0.8
9	Virginia	0.8
10	California	0.7
11	Colorado	0.7
12	Michigan	0.6
13	Pennsylvania	0.6
14	Illinois	0.5
15	New York	0.5
16	Nevada	0.5
17	North Carolina	0.4
18	Tennessee	0.4
19	Utah	0.4
20	Missouri	0.4
21	Hawaii	0.3
22	Maine	0.3
23	Connecticut	0.3
24	Ohio	0.3
25	Minnesota	0.3
26	Alabama	0.3
27	New Hampshire	0.2
28	Texas	0.2
29	West Virginia	0.2
30	Nebraska	0.2
31	Alaska	0.2
32	Oregon	0.2
33	Montana	0.2
34	Oklahoma	0.2
35	Rhode Island	0.2
36	North Dakota	0.2
37	Indiana	0.2
38	Florida	0.2
39	Arizona	0.1
40	Vermont	0.1
41	Wisconsin	0.1
42	Georgia	0.1
43	Arkansas	0.1
44	Iowa	0.1
45	South Carolina	0.1
46	Kansas	0.1
47	Kentucky	0.1
48	Wyoming	0.1
49	South Dakota	0.1
50	Mississippi	0.0
51	Louisiana	0.0

U.S. States Ranking of Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171) Jobs per 1,000 Resident Population in 2005

Rank	State	NAICS 54171
1	Dist of Columbia	18
2	New Mexico	7
3	Massachusetts	5
4	Delaware	5
5	Idaho	5
6	Maryland	5
7	New Jersey	3
8	Virginia	3
9	Washington	3
10	Colorado	3
11	California	2
12	Michigan	2
13	Pennsylvania	2
14	Nevada	2
15	Illinois	2
16	New York	2
17	North Carolina	2
18	Tennessee	2
19	Utah	1
20	Missouri	1
21	Connecticut	1
22	Hawaii	1
23	Maine	1
24	Minnesota	1
25	Ohio	1
26	New Hampshire	1
27	Alabama	1
28	Nebraska	1
29	Texas	1
30	Oregon	1
31	North Dakota	1
32	Alaska	1
33	Montana	1
34	Rhode Island	1
35	West Virginia	1
36	Indiana	1
37	Florida	1
38	Wisconsin	1
39	Oklahoma	1
40	Vermont	1
41	Arizona	0
42	Georgia	0
43	Iowa	0
44	Arkansas	0
45	Kansas	0
46	South Carolina	0
47	Kentucky	0
48	Wyoming	0
49	South Dakota	0
50	Mississippi	0
51	Louisiana	0

U.S. States Ranking of Annual Payrolls in Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171) Industries in 2005, (in 1000s)

	State	
1	California	8,541,794
2	Massachusetts	3,565,977
3	New Jersey	2,993,353
4	Illinois	2,926,429
5	Pennsylvania	2,516,152
6	New York	2,224,388
7	Michigan	2,151,418
8	Maryland	1,987,476
9	Virginia	1,885,616
10	Washington	1,405,719
11	Texas	1,354,948
12	Colorado	1,166,923
13	North Carolina	1,027,437
14	New Mexico	993,065
15	Ohio	991,382
16	Missouri	840,027
17	District of Columbia	751,577
18	Florida	751,399
19	Tennessee	631,499
20	Minnesota	476,376
21	Connecticut	461,950
22	Delaware	454,695
23	Idaho	450,219
24	Nevada	432,196
25	Alabama	305,879
26	Indiana	272,627
27	Wisconsin	246,926
28	Utah	235,740
29	Georgia	235,659
30	Arizona	200,978
31	Oregon	175,498
32	Hawaii	115,499
33	New Hampshire	109,794
34	Oklahoma	101,065
35	Nebraska	79,641
36	South Carolina	77,243
37	Maine	76,500
38	Kentucky	71,490
39	West Virginia	57,155
40	Iowa	55,419
41	Rhode Island	45,159
42	Arkansas	45,064
43	Kansas	44,014
44	Montana	36,644
45	Louisiana	35,607
46	Mississippi	24,269
47	Alaska	19,588
48	Vermont	16,896
49	North Dakota	15,614
50	South Dakota	10,162
51	Wyoming	4,503

U.S. States Ranking of Wage and Salary Medical Equipment and Supplies Manufacturing (NAICS 3391) Jobs in 2005

	State	2005
1	California	47,762
2	Florida	20,050
3	Pennsylvania	17,535
4	Indiana	17,183
5	New York	15,805
6	Minnesota	14,644
7	Texas	12,297
8	Massachusetts	11,981
9	New Jersey	11,876
10	Ohio	11,487
11	Illinois	10,903
12	Michigan	9,315
13	Utah	7,741
14	North Carolina	7,523
15	Connecticut	7,045
16	Tennessee	6,951
17	Georgia	6,878
18	Wisconsin	5,974
19	Colorado	5,850
20	Missouri	4,626
21	Nebraska	3,703
22	Arizona	3,599
23	Oregon	3,484
24	Washington	3,409
25	South Carolina	3,403
26	Virginia	3,187
27	Alabama	2,698
28	New Hampshire	2,633
29	Arkansas	2,553
30	Maryland	2,310
31	Kentucky	2,076
32	Kansas	1,984
33	Iowa	1,772
34	South Dakota	1,352
35	Rhode Island	1,309
36	Oklahoma	1,272
37	Maine	1,102
38	Delaware	937
39	Idaho	921
40	Nevada	859
41	Mississippi	857
42	Louisiana	839
43	New Mexico	835
44	West Virginia	811
45	Vermont	500
46	Montana	360
47	Hawaii	296
48	North Dakota	193
49	Alaska	72
50	District of Columbia	0
51	Wyoming	0

U.S. States Ranking of Medical Equipment and Supplies Manufacturing (NAICS 3391) Industry Share of Total Private Sector Wage and Salary Jobs in 2005

	State	2005
1	Utah	0.8
2	Indiana	0.7
3	Minnesota	0.6
4	Nebraska	0.5
5	Connecticut	0.5
6	New Hampshire	0.5
7	South Dakota	0.4
8	Massachusetts	0.4
9	California	0.4
10	Pennsylvania	0.4
11	New Jersey	0.4
12	Colorado	0.3
13	Rhode Island	0.3
14	Tennessee	0.3
15	Florida	0.3
16	Arkansas	0.3
17	Delaware	0.3
18	Michigan	0.3
19	Wisconsin	0.3
20	Ohio	0.3
21	Oregon	0.3
22	North Carolina	0.2
23	New York	0.2
24	South Carolina	0.2
25	Maine	0.2
26	Illinois	0.2
27	Georgia	0.2
28	Missouri	0.2
29	Vermont	0.2
30	Kansas	0.2
31	Idaho	0.2
32	Alabama	0.2
33	Arizona	0.2
34	Texas	0.2
35	Washington	0.2
36	Iowa	0.1
37	West Virginia	0.1
38	Kentucky	0.1
39	New Mexico	0.1
40	Maryland	0.1
41	Oklahoma	0.1
42	Virginia	0.1
43	Montana	0.1
44	Mississippi	0.1
45	Nevada	0.1
46	North Dakota	0.1
47	Hawaii	0.1
48	Louisiana	0.1
49	Alaska	0.0
50	District of Columbia	0.0
51	Wyoming	0.0

U.S. States Ranking of Medical Equipment and Supplies Manufacturing (NAICS 3391) Jobs per 1,000 Resident Population in 2005

Rank	State	NAICS 54171
1	Utah	3
2	Minnesota	3
3	Indiana	3
4	Nebraska	2
5	New Hampshire	2
6	Connecticut	2
7	Massachusetts	2
8	South Dakota	2
9	Pennsylvania	1
10	New Jersey	1
11	California	1
12	Colorado	1
13	Rhode Island	1
14	Tennessee	1
15	Florida	1
16	Delaware	1
17	Wisconsin	1
18	Ohio	1
19	Oregon	1
20	Michigan	1
21	Arkansas	1
22	North Carolina	1
23	Illinois	1
24	Maine	1
25	New York	1
26	Vermont	1
27	South Carolina	1
28	Missouri	1
29	Georgia	1
30	Kansas	1
31	Idaho	1
32	Arizona	1
33	Iowa	1
34	Alabama	1
35	Washington	1
36	Texas	1
37	Kentucky	0
38	West Virginia	0
39	New Mexico	0
40	Virginia	0
41	Maryland	0
42	Montana	0
43	Oklahoma	0
44	Nevada	0
45	North Dakota	0
46	Mississippi	0
47	Hawaii	0
48	Louisiana	0
49	Alaska	0
50	Dist of Columbia	0
51	Wyoming	0

U.S. States Ranking of Annual Payrolls Medical Equipment and Supplies Manufacturing (NAICS 3391) Industries in 2005, (in 1000's)

	State	
1	California	3,031,635
2	Indiana	1,007,210
3	Florida	920,655
4	Pennsylvania	917,004
5	Minnesota	878,001
6	New Jersey	827,198
7	New York	762,643
8	Massachusetts	750,813
9	Illinois	667,689
10	Texas	536,491
11	Ohio	482,595
12	Michigan	458,175
13	Connecticut	373,357
14	Georgia	337,310
15	North Carolina	327,514
16	Utah	326,141
17	Tennessee	325,768
18	Colorado	301,965
19	Wisconsin	257,502
20	Missouri	190,658
21	Arizona	163,719
22	Nebraska	148,824
23	Oregon	143,937
24	South Carolina	127,039
25	Washington	124,058
26	New Hampshire	123,024
27	Virginia	114,766
28	Maryland	105,906
29	Alabama	83,780
30	Kentucky	83,060
31	Arkansas	79,977
32	Kansas	69,074
33	Iowa	67,114
34	South Dakota	65,822
35	Rhode Island	56,687
36	Oklahoma	44,751
37	Delaware	43,554
38	Idaho	32,282
39	Nevada	31,739
40	Maine	31,443
41	West Virginia	31,172
42	New Mexico	26,626
43	Mississippi	25,418
44	Louisiana	22,966
45	Vermont	17,005
46	Montana	11,510
47	Hawaii	11,085
48	North Dakota	5,968
49	Alaska	2,727
50	District of Columbia	0
51	Wyoming	0

U.S. States Ranking of Wage and Salary Pharmaceutical and Medicine Manufacturing (NAICS 3254) Jobs in 2005

	State	2005
1	California	41,743
2	New Jersey	40,235
3	New York	22,050
4	Pennsylvania	21,824
5	North Carolina	20,628
6	Illinois	20,143
7	Indiana	19,493
8	Michigan	9,682
9	Connecticut	9,671
10	Texas	9,387
11	Massachusetts	7,777
12	Maryland	5,335
13	Missouri	5,284
14	Ohio	5,016
15	Utah	4,474
16	Florida	4,136
17	Virginia	3,635
18	Georgia	3,232
19	South Carolina	3,144
20	Wisconsin	2,864
21	Minnesota	2,679
22	Colorado	2,625
23	Iowa	2,622
24	Tennessee	2,322
25	Washington	1,978
26	Nebraska	1,976
27	Rhode Island	1,536
28	Kansas	1,430
29	Kentucky	1,229
30	Mississippi	1,145
31	Maine	1,046
32	Arizona	1,008
33	New Hampshire	725
34	New Mexico	720
35	Oregon	702
36	Delaware	628
37	Alabama	575
38	Nevada	490
39	Oklahoma	312
40	Louisiana	265
41	Arkansas	145
42	District of Columbia	141
43	Montana	85
44	Wyoming	83
45	Vermont	38
46	Idaho	22
47	Alaska	0
48	Hawaii	0
49	South Dakota	0
50	West Virginia	0
51	North Dakota	0

U.S. States Ranking of Pharmaceutical and Medicine Manufacturing (NAICS 3254) Industry Share of Total Private Sector Wage and Salary Jobs in 2005

	State	2005
1	New Jersey	1.2
2	Indiana	0.8
3	Connecticut	0.7
4	North Carolina	0.6
5	Utah	0.5
6	Pennsylvania	0.5
7	Illinois	0.4
8	Rhode Island	0.4
9	California	0.3
10	New York	0.3
11	Massachusetts	0.3
12	Nebraska	0.3
13	Michigan	0.3
14	Maryland	0.3
15	Missouri	0.2
16	Iowa	0.2
17	Maine	0.2
18	South Carolina	0.2
19	Delaware	0.2
20	Colorado	0.1
21	New Hampshire	0.1
22	Kansas	0.1
23	Mississippi	0.1
24	Virginia	0.1
25	Wisconsin	0.1
26	New Mexico	0.1
27	Texas	0.1
28	Minnesota	0.1
29	Ohio	0.1
30	Tennessee	0.1
31	Georgia	0.1
32	Washington	0.1
33	Kentucky	0.1
34	Florida	0.1
35	Oregon	0.1
36	Arizona	0.0
37	Nevada	0.0
38	Wyoming	0.0
39	Alabama	0.0
40	District of Columbia	0.0
41	Oklahoma	0.0
42	Montana	0.0
43	Louisiana	0.0
44	Vermont	0.0
45	Arkansas	0.0
46	Idaho	0.0
47	Alaska	0.0
48	Hawaii	0.0
49	North Dakota	0.0
50	South Dakota	0.0
51	West Virginia	0.0

U.S. States Ranking of Pharmaceutical and Medicine Manufacturing (NAICS 3254) Jobs per 1,000 Resident Population in 2005

Rank	State	NAICS 54171
1	Utah	3
2	Minnesota	3
3	Indiana	3
4	Nebraska	2
5	New Hampshire	2
6	Connecticut	2
7	Massachusetts	2
8	South Dakota	2
9	Pennsylvania	1
10	New Jersey	1
11	California	1
12	Colorado	1
13	Rhode Island	1
14	Tennessee	1
15	Florida	1
16	Delaware	1
17	Wisconsin	1
18	Ohio	1
19	Oregon	1
20	Michigan	1
21	Arkansas	1
22	North Carolina	1
23	Illinois	1
24	Maine	1
25	New York	1
26	Vermont	1
27	South Carolina	1
28	Missouri	1
29	Georgia	1
30	Kansas	1
31	Idaho	1
32	Arizona	1
33	Iowa	1
34	Alabama	1
35	Washington	1
36	Texas	1
37	Kentucky	0
38	West Virginia	0
39	New Mexico	0
40	Virginia	0
41	Maryland	0
42	Montana	0
43	Oklahoma	0
44	Nevada	0
45	North Dakota	0
46	Mississippi	0
47	Hawaii	0
48	Louisiana	0
49	Alaska	0
50	Dist of Columbia	0
51	Wyoming	0

U.S. States Ranking of Annual Payrolls in Pharmaceutical and Medicine Manufacturing (NAICS 3254) Industries in 2005, (in 1000's)

	State	
1	California	5,101,375
2	New Jersey	4,160,331
3	Pennsylvania	1,923,609
4	Illinois	1,753,856
5	Indiana	1,737,905
6	New York	1,577,801
7	North Carolina	1,536,054
8	Connecticut	1,042,054
9	Texas	909,472
10	Massachusetts	778,610
11	Michigan	744,625
12	Maryland	396,351
13	Missouri	334,728
14	Ohio	311,133
15	Virginia	253,408
16	Georgia	249,212
17	Florida	229,486
18	Utah	196,347
19	Colorado	193,450
20	Tennessee	186,346
21	Minnesota	164,620
22	Washington	164,429
23	Wisconsin	156,621
24	South Carolina	141,567
25	Rhode Island	131,520
26	Iowa	127,669
27	Nebraska	104,234
28	Kansas	88,841
29	Kentucky	76,841
30	Maine	71,102
31	Arizona	54,425
32	Delaware	41,627
33	New Hampshire	39,565
34	Mississippi	38,757
35	New Mexico	31,930
36	Alabama	25,820
37	Oregon	24,253
38	District of Columbia	21,659
39	Nevada	20,260
40	Oklahoma	14,164
41	Louisiana	13,447
42	Arkansas	5,482
43	Wyoming	3,439
44	Montana	3,084
45	Idaho	1,960
46	Vermont	1,873
47	Alaska	0
48	Hawaii	0
49	South Dakota	0
50	West Virginia	0
51	North Dakota	0

U.S. States Ranking of the Share of Post-Doctorates in Doctorate Granting Institutions, 2003

Rank	State	Share
1	California	16.4
2	Massachusetts	12.8
3	New York	8.0
4	Utah	6.4
5	Pennsylvania	5.1
6	Maryland	4.0
7	North Carolina	3.8
8	Michigan	3.0
9	Illinois	2.8
10	Colorado	2.8
11	Connecticut	2.7
12	Ohio	2.5
13	Georgia	2.2
14	Florida	2.2
15	Washington	2.2
16	Missouri	2.0
17	Minnesota	2.0
18	Texas	1.7
19	Indiana	1.6
20	New Jersey	1.5
21	Virginia	1.4
22	Wisconsin	1.3
23	Iowa	1.2
24	Arizona	1.1
25	Louisiana	0.8
26	Alabama	0.7
27	Kansas	0.7
28	Vermont	0.7
29	South Dakota	0.6
30	Oregon	0.6
31	Kentucky	0.6
32	Nebraska	0.5
33	New Hampshire	0.4
34	Oklahoma	0.4
35	Mississippi	0.4
36	South Carolina	0.3
37	Delaware	0.3
38	District of Columbia	0.3
39	Arkansas	0.3
40	Hawaii	0.3
41	New Mexico	0.2
42	Montana	0.2
43	Nevada	0.2
44	North Dakota	0.2
45	Idaho	0.2
46	Wyoming	0.1
47	Maine	0.1
48	Rhode Island	0.1
49	West Virginia	0.1
50	Tennessee	0.0
51	Alaska	0

U.S. States Ranking of the Percentage Share of NIH Grants Obtained Betweeen 2000-2005

Rank	State	Share
1	California	15.3
2	Massachusetts	**10.1**
3	New York	9.0
4	Pennsylvania	6.4
5	Maryland	6.3
6	Texas	5.3
7	North Carolina	4.3
8	Washington	3.6
9	Illinois	3.1
10	Ohio	3.1
11	Michigan	2.5
12	Missouri	2.4
13	Connecticut	2.0
14	Minnesota	1.9
15	Tennessee	1.8
16	Wisconsin	1.7
17	Virginia	1.7
18	Georgia	1.6
19	Florida	1.5
20	Colorado	1.5
21	Alabama	1.4
22	New Jersey	1.2
23	Oregon	1.2
24	Dist of Columbia	1.1
25	Indiana	0.9
26	Iowa	0.9
27	Arizona	0.7
28	Utah	0.7
29	Louisiana	0.7
30	Kentucky	0.6
31	Rhode Island	0.6
32	South Carolina	0.5
33	New Mexico	0.5
34	New Hampshire	0.4
35	Kansas	0.4
36	Oklahoma	0.4
37	Maine	0.3
38	Vermont	0.3
39	Nebraska	0.3
40	Hawaii	0.3
41	Arkansas	0.3
42	Mississippi	0.2
43	Montana	0.1
44	Delaware	0.1
45	Nevada	0.1
46	West Virginia	0.1
47	South Dakota	0.1
48	North Dakota	0.1
49	Alaska	0.0
50	Idaho	0.0
51	Wyoming	0.0