THE GEORGIA LIFE SCIENCES INDUSTRY ANALYSIS 2006

Shaping Infinity

GEORGIA BIOMEDICAL PARTNERSHIP, INC.

SELIG CENTER FOR ECONOMIC GROWTH

TERRY COLLEGE OF BUSINESS • THE UNIVERSITY OF GEORGIA

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From the President of the Georgia Biomedical Partnership

The Georgia Biomedical Partnership is pleased to present *Shaping Infinity*, the first-ever comprehensive analysis of the state's life sciences companies and their impact on the economy and health of Georgians.

This exciting inaugural Georgia Life Sciences Industry Report was produced by the University of Georgia's Selig Center for Economic Growth in the Terry College of Business. The report provides a full range of data from venture capital raised by start-ups to the kinds of therapeutics and other medical products manufactured and marketed by established companies.

The informative study reveals that more than 250 life sciences companies combined with Georgia's universities and other research institutions, such as the U.S. Centers for Disease Control and Prevention, have a huge impact on the state's economy. The dramatic growth in the number of companies over the last decade clearly demonstrates this is an industry on the move with enormous potential.

The Georgia Life Sciences Industry Report will be an annual survey that will plot the progress of this dynamic sector and the development of Georgia as a national center for life sciences research and commercial development.

The Georgia Biomedical Partnership, a private non-profit association representing the life sciences industry, sincerely thanks sponsors Georgia Power and the Georgia Research Alliance for their support in making this 2006 report possible.

Charles Craig, President
Georgia Biomedical Partnership
www.gabio.org

Executive Summary

The first Life Sciences Industry Analysis attempts to fill the gaps in publicly available data with much needed detail concerning the size, operations, and production of the life sciences companies in Georgia. The survey was sent to addresses identified by database searches, using the North American Industry Classification System (NAICS), and other publicly available sources. After this report was completed, however, additional companies were identified, and these will be included in future publications.

Although this analysis encompasses an overview of the life sciences industry and its components in Georgia, the discussion of survey topics pertains only to the companies covered. This report does not extrapolate survey results on the full spectrum of the life sciences industry in the state. The responses to the survey gave us a unique opportunity to have a closer look at the biotechnology, medical devices, and pharmaceutical manufacturing companies in the state, since relatively few medical and diagnostic laboratories were included in the survey, and very few surgical appliances firms responded. We hope that the subsequent editions of this report will include more companies, and provide a fuller picture of the life sciences industry in Georgia.

Most of the 108 companies covered by the first Georgia Life Sciences Industry Survey are involved in manufacturing and R&D in the areas of therapeutics and medical devices. Although close to a half of these companies were established within the last decade and employ between one and ten workers, nineteen companies have more than 100 employees, and fifteen firms report revenues of $50 million or more.

The 76 responding companies are even more focused on R&D, and their activities involve close ties to academic institutions. The companies in this group focus on medical devices, biopharmaceuticals, and platform technologies, and specifically target cancer, bacterial and viral infections, and inflammation, as well as neurological, cardiovascular, and reproductive conditions.

Although more than half of the 76 responding companies operated at a loss in 2005, this group also includes ten publicly traded companies, and six companies with incomes of $11 million or more. Most of them are intensely involved in raising capital, too. Over the years, however, as more products moved from final development and into the approval process, the sources of capital also shifted from founders, and family and friends toward partnerships, grants, and venture capital.

Although the life sciences industry as a whole constitutes only a small part of Georgia's economy, its 2001-2005 growth outpaced the rest of the state's economy by a wide margin. The increase was visible both in the number of companies and the size of employment. The life sciences industry not only added jobs in research and development, but also in manufacturing, which provides close to a half (44 percent) of the life sciences jobs in the state. Although some of the life sciences manufacturing sectors lost employees in the last five years, the largest of them—pharmaceutical manufacturing and surgical appliances and supplies—added jobs, which is a remarkable accomplishment given the heavy losses sustained by Georgia's manufacturers at that time. The fastest growth, however, took place in life sciences R&D, with biotechnology being the most prolific.

The industry also pays higher wages than the state average. While wages in private industry in Georgia averaged $39,506 in 2005, salaries in the life sciences averaged $57,683, with the highest being paid in biotechnology. The high wages benefit not only professionals, however. According to the Bureau of Labor Statistics, the average 2005 wage in pharmaceutical manufacturing in Georgia reached $77,104. Sales boomed,

too. Georgia's life sciences industry's sales increased by 32.2 percent between the 1997 and the 2002 Economic Census, and reached $4.5 billion in 2002. If these rates of growth continue, sales should reach $6.2 billion this year.

Fueled by several factors, the prospects for long-term growth of the life sciences industry are solid. First, the aging population creates the demand for new and improved medical treatments. Second, rising fuel prices generate an unprecedented interest in bio fuels. Third, the challenges posed by climate changes and by natural and man-made disasters call for new ways to raise crops and clean up the environment. Finally, emerging diseases and the continued threat of epidemics and bio-terrorism call for more research in and manufacturing of remedies and vaccines.

It is no surprise that the rapidly growing life sciences industry engenders intense competition among states. Within the last five years alone, biotechnology has become a highly sought-after industry for most states. For example, forty-four states currently are engaged in building life sciences R&D capacity (up from thirty-three states in 2004), forty-six states offer support to life sciences firms (up from twenty-two in 2004), and twenty-seven states make capital available (no data available for 2004).

Georgia actively courts this industry through research initiatives, funding for eminent scholars, support for life sciences business incubators and other facilities. But some serious challenges remain: the most vital of which—as the survey shows—is access to capital, and the shortage of skilled labor. While the availability of facilities and high salaries are a definite draw, the access to capital remains a serious challenge. Most of the companies surveyed are actively looking for business partners for funding. If the prospective partners are located elsewhere, the pull may prove to be stronger than the draw, and more successful, young companies may be lured away.

The authors and sponsors of this study thank the many company executives who participated in the survey for the time and thought they devoted to this project.

Life Sciences Industry Overview

The life sciences industry uses modern biological techniques and supporting technologies with a goal to improve human and animal health, address threats to the environment, improve crop production, contain emerging and existing diseases, and improve currently used manufacturing technologies. These industries also utilize a specialized workforce, manufacturing procedures and facilities, and often require targeted funding.

For the purpose of this study, the life sciences industry includes life sciences research and development, pharmaceutical and medicine manufacturing, electro-medical apparatus manufacturing, surgical and medical instrument manufacturing, surgical appliance and supplies manufacturing, medical and diagnostic laboratories, and blood and organ banks. This broad definition encompasses biotechnology, pharmaceuticals, diagnostics, and medical device branches, as they all are a part of the state's life sciences base that reaches from the high tech labs at the leading universities to manufacturing facilities scattered around the state.

The growth of the life sciences industry in Georgia has been captured by the U.S. Economic Census, which reported that the number of bioscience companies in the state climbed by 30 percent between 1997 and 2002, with the largest jump—77 percent—reported in life sciences research and development. While the industry's annual payroll almost doubled, the number of paid employees increased by 33 percent, with the highest—almost triple-fold—growth in blood and organ banks and life sciences R&D. At the same time, the life sciences industry's sales jumped by over 30 percent. In 2002, Georgia ranked fourteenth in the number of life sciences establishments and had the eighteenth largest life sciences workforce in the country (private industry only).

The most recent Bureau of Labor Statistics data show that the number of life science companies kept growing through 2005. According to this source, employment in Georgia's life sciences sector reached 15,237 employees in 2005: 1,947 in life science research and development, 3,232 in pharmaceutical manufacturing, 3,518 in surgical, electro-medical and electrotherapeutic instruments manufacturing, and 6,540 in medical and diagnostic laboratories and blood and organ banks. Since the Bureau of Labor Statistics data report only private employment covered by unemployment insurance, the size of the life sciences industry workforce is actually much larger, and includes, for example, 6,500 employees of the Centers for Disease Control and Prevention, and close to 1,000 biological sciences faculty at state universities.

Overall, the average annual salary for employees (including professionals, manufacturing workers, and administrative support) in the private sector of the life sciences industry reached $57,683 in 2005. The annual salary of $77,104 in pharmaceutical manufacturing topped the sector's pay scale. Pay in the medical devices manufacturing sectors ranged from $75,281 to $49,254, while life sciences research and development averaged $67,698. Based on the average annual rate of employment growth, the 2006 private life sciences employment in Georgia is estimated at 15,648, with the strongest employment growth in life sciences R&D and medical and diagnostic laboratories, and weak gains and even losses in some of the medical devices manufacturing sectors. (See Table 1.)

Table 1
The Biosciences Industry in Georgia, 2005

	Number of Establishments	All Employees	Average Annual Pay (dollars)	Total Wages ($000)
Total, all industries	254,491	3,933,307	39,089	153,750,251
Biosciences industry				
Life science research and development*	145	1,947	67,698	131,809
Pharmaceutical and medicine manufacturing	43	3,232	77,104	249,212
Medicinal and botanical manufacturing	4	ND	ND	ND
Pharmaceutical preparation manufacturing	29	2,496	81,279	202,866
In-vitro diagnostic substance manufacturing	8	ND	ND	ND
Other biological product manufacturing	2	ND	ND	ND
Electromedical apparatus manufacturing	7	250	57,736	14,444
Surgical and medical instrument manufacturing	9	788	75,281	59,296
Surgical appliance and supplies manufacturing	48	2,480	49,254	122,137
Medical and diagnostic laboratories	385	5,118	45,010	230,375
Blood and organ banks	31	1,422	50,363	71,637
Biosciences industry total	668	15,237	57,683	878,910

*Estimated by the Selig Center for Economic Growth, Terry College of Business, The University of Georgia.

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Medical and diagnostic laboratories, pharmaceutical manufacturing, and surgical appliance and supplies manufacturing are the largest sectors of the biosciences industry in Georgia. Medical and diagnostic laboratories constitute 58 percent of these establishments and provide 34 percent of the industry's employment, and 26 percent of total annual wages. The group of 43 pharmaceutical manufacturers provides jobs for 21 percent of the industry's workforce, and 28.4 percent of the wages. Surgical appliances manufacturers provide 16.3 percent of jobs in the life sciences industry, and 13.9 percent of wages. Life sciences research and development firms, on the other hand, employ only 12.8 percent of the industry's workforce, but provide 15 percent of its wages. (See Table 2.)

Although a relatively small part of the state's economy, Georgia's life sciences industry as a whole expanded at a much faster pace than the rest of the state's industry sectors. The number of life sciences establishments increased by an impressive 38.4 percent (compared to the 10.5 percent average for all industries), employment jumped by 11.2 percent (compared to the 1.6 percent all-industry average), and total wages jumped by almost 30 percent, compared to a 13 percent increase in the state economy as a whole. While the largest life sciences manufacturing sub-sectors (pharmaceuticals and surgical appliances and supplies) were spared much of the perils faced by Georgia's manufacturers since 2001, and expanded by 1.9 percent and 17 percent, respectively, between 2001 and 2005, other manufacturing sub-sectors of the life sciences industry suffered losses. Medical and diagnostic laboratories, and life sciences R&D, on the other hand, expanded their employment by 27.8 percent and 46.5 percent, respectively, during the same period.

In terms of the number of life sciences professionals employed in both private and government-run institutions, Georgia ranks fifteenth in the country. While the life sciences

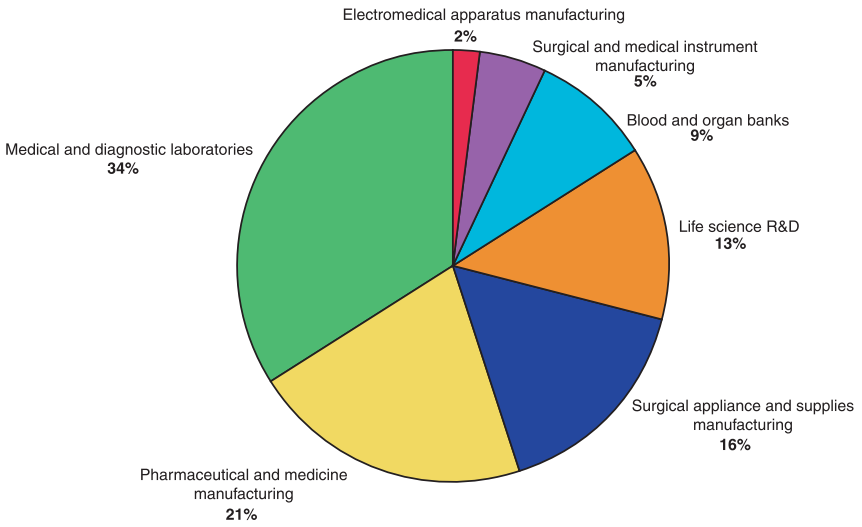
Table 2
Growth of the Life Sciences Industry in Georgia, 2001-2005

	2001	2002	2003	2004
Total, all Industries				
Number of establishments	230,232	234,527	240,652	246,854
All employees	3,871,763	3,807,915	3,783,232	3,840,663
Total wages ($000)	136,039,438	136,071,349	138,564,788	145,429,681
Biosciences industry				
Number of establishments	482	551	610	653
All employees	13,699	14,401	14,738	14,884
Total wages (in thousands)	676,626	737,582	785,617	826,031

	2005	2001-2005 Percent Change	Compound Annual Rate of Growth (percent)
Total, all Industries			
Number of establishments	254,491	10.5	2.5
All employees	3,933,307	1.6	0.4
Total wages ($000)	153,750,251	13.0	3.1
Biosciences industry			
Number of establishments	668	38.4	8.5
All employees	15,237	11.2	2.7
Total wages (in thousands)	878,910	29.9	6.8

Source: Selig Center for Economic Growth, based on data from the Bureau of Labor Statistics.

Employment in Life Sciences Sectors, Georgia, 2005



Source: Selig Center for Economic Growth, Terry College of Business, Based on Bureau of Labor Statistics data.

professionals' average salary of $56,948 ranks eighth among the states, medical scientists' average salary in Georgia ranks third, and microbiologists' earnings rank fourth in the country.

Biotechnology

Among the life sciences R&D companies, the 2002 Economic Census counted 45 biotechnology firms—firms that constitute the high-tech heart of the biosciences industry. In 2006, Ernst & Young reported over 50 biotechnology firms in Georgia. Based on the number of biotechnology firms, the state advanced in rank from eleventh to seventh in the nation between 2001 and 2005, breezing past Texas, Florida and Washington.

Life sciences R&D and medical devices firms together create the base of the biotechnology industry, the youngest branch of the broadly defined life sciences. In addition, many of the traditional pharmaceutical firms have also shifted their focus towards biopharmaceutical R&D and manufacturing. The operations of biopharmaceutical and medical devices firms involved in product development differ from the traditional pharmaceutical manufacturing and other bioscience branches due to high development costs and a long approval process, which may take an average of 15 years before the product hits the market. Therefore, access to capital is a major obstacle, especially for young companies with no marketed products.

Venture capital is an important source of funding for the life sciences industry, especially for life sciences R&D firms and medical devices companies. Venture capital backing reflects investors' confidence in the industry's future and the assessment of its present state, and provides a valuable measure of the industry's strength.

Between 1995 and the first quarter of 2006, Georgia's biosciences firms in life sciences R&D and medical devices

Table 3
Life Sciences Occupations in Georgia's Workforce, May 2005

	Total Employed		Annual Average Salary	
	Number	State Rank	Dollars	State Rank
Soil and plant scientists	280	10	54,550	25
Microbiologists	560	8	71,780	4
Zoologists and wildlife biologists	570	7	48,480	39
Biological scientists, all other	660	11	60,290	23
Epidemiologists	220	5	56,160	15
Medical scientists, except epidemiologists	430	22	87,180	3
Life scientists, all other	210	13	NA	
Biological technicians	700	25	34,520	20
Environmental science and protection technicians, including health	630	17	36,860	24
Life, physical, and social science technicians, all other+	2,260	9	55,070	3
Biological science teachers, postsecondary	1,410	11	75,900	10
Total	7,930	15	56,948	8

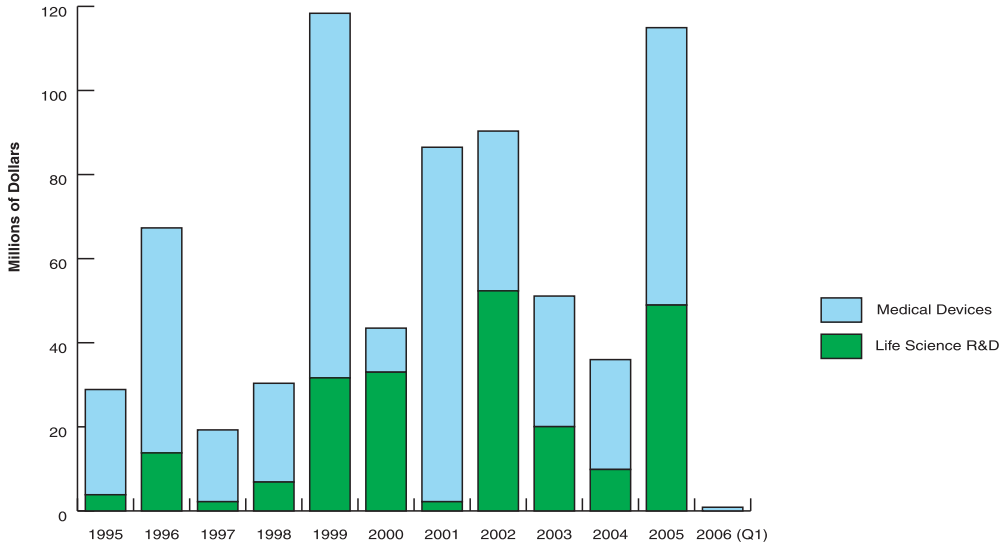
+ Includes non-life sciences occupations.
NA Not available.

Source: Bureau of Labor Statistics, 2006. Ranking by the Selig Center for Economic Growth, Terry College of Business, The University of Georgia.

secured $687 million in 109 deals. Although medical devices firms raised double the amount of money ($462 million, compared to $224 million in life sciences R&D), life sciences R&D firms got more money per deal ($7.8 million compared to $5.8 million in medical devices). In addition, although the average amount per deal is lower than the national average for both life sciences R&D and medical devices firms in Georgia, medical devices firms are much closer to the national average.

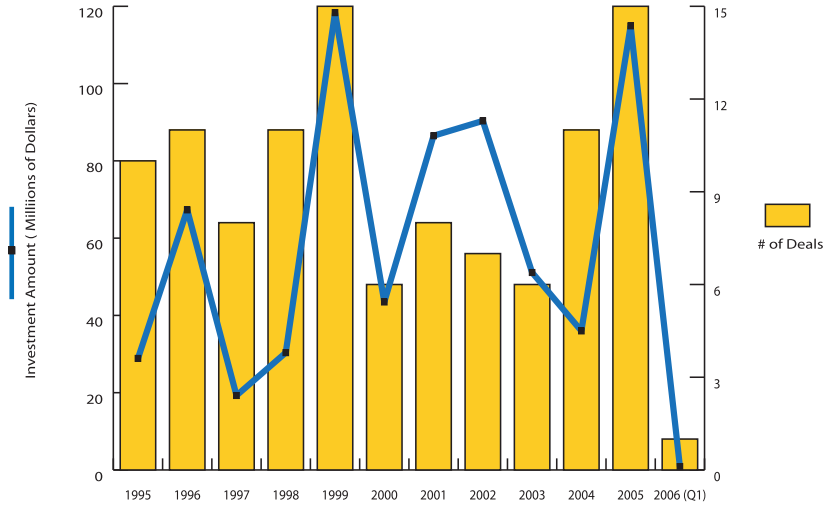
It is important to note that while medical devices firms in Georgia historically were able to attract more venture capital funds, the gap between these two branches of the biosciences industry has narrowed since 2002, with 2005 being the best year for life sciences R&D in the number of deals—seven—and second best in the amount of capital raised since 1995 ($49 million).

Amount of Venture Capital Invested in Georgia's Life Sciences R&D and Medical Devices Firms



Source: Selig Center for Economic Growth, based on data from PriceWaterhouseCoopers, Money Tree Report.

Venture Capital Invested in Life Science R&D and Medical Devices, Georgia, 1995-2006



Source: Selig Center for Economic Growth, based on data from PriceWaterhouseCoopers, Money Tree Report.

The Survey

The first Georgia Life Sciences Industry Survey was sent out to 252 companies active in the areas of life sciences R&D, pharmaceutical and medical devices manufacturing, medical and diagnostic laboratories, and blood and organ banks. The majority of Georgia's life sciences companies are located in the metropolitan Atlanta area (Atlanta, Alpharetta, Marietta, and Norcross), Athens, and Augusta, with the remaining companies sited in Gainesville, Macon, Savannah, and other locations.

Table 4
Survey Details

	Valid Surveys Sent	Surveys Returned	Participation Rate
Augusta	11	4	36.4
Athens	22	6	27.3
Atlanta	196	60	30.6
Columbus	2		0.0
Gainesville	3	1	33.3
Macon	3	2	66.7
Rome	2		0.0
Savannah	2		0.0
Other locations	11	3	27.3
Total	252	76	30.2

Seventy-six companies responded to the survey, which places the overall response rate at 30.2 percent. In addition to the returned questionnaires, we have compiled data from publicly available sources for an additional 32 companies. Thus, for selected survey questions, we are able to provide information for 108 companies, or over 43 percent of those surveyed. Considering that medical and diagnostic labs constituted close to a half of Georgia's life sciences industry in 2005, and only 17 percent of companies in our survey, these companies are severely underrepresented, thus making the sample much more reflective of the pharmaceutical, biotechnology, and medical devices branches.

The areas with the largest number of biosciences companies (Atlanta, Athens, and Augusta) are represented at a rate approaching the overall response rate, which is also true for companies located in non-metropolitan areas.

General Company Information

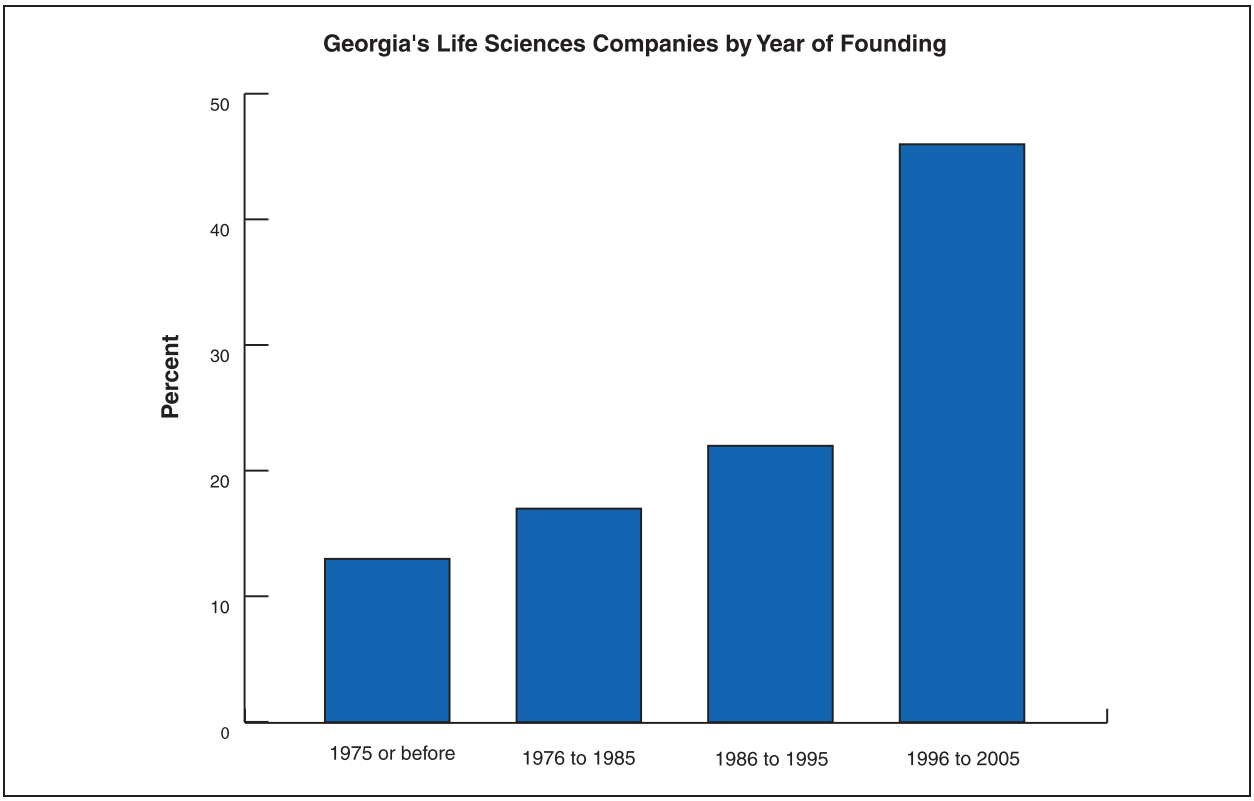
108 SURVEYED COMPANIES

Although some of the pharmaceutical firms operating in the state today were established a century ago, the modern biosciences industry in Georgia emerged in the last two decades, and especially in the last 10 years. In fact, over 47 percent of the 108 companies covered by the survey reported that their firms were founded between 1996 and 2006.

The life sciences industry in Georgia is not only young, it is mostly homegrown, too. Nearly 80 percent of the 108 biosciences companies covered by the survey are headquartered in Georgia, and another 8.3 percent are headquartered in either New York or New Jersey. The remaining companies are based in California, Florida, Illinois, Massachusetts, Michigan, North Carolina, Texas, Canada, and Europe.

Employment and facilities size, along with the revenues of companies covered by the survey reflect the diversity of the life sciences industry in Georgia, where small firms coexist with multi-national conglomerates. Although smaller firms constitute the majority of the sample, the full spectrum of companies is represented.

Small firms, or those with fewer than 10 employees, comprise nearly half of the 108 surveyed companies, but larger firms, (with between 11 to 100 employees) comprise 36 percent of the group. Companies reporting employment of over 100 workers make up 18 percent of the firms covered by the



survey. Among the 76 responding companies, small companies constituted 58 percent of the total, and large ones made up over 10 percent of the total.

The majority of the 108 firms (52 percent) occupy facilities with less than 10,000 square feet of space. While companies with facilities of 10,000 to 50,000 square feet are the second largest group (30 percent), close to 7 percent of companies reported facilities of over 100,000 square feet. (See Table 6.)

Revenues of 70 percent of these firms, 82 percent of them private, and 18 percent public, did not exceed $10 million in 2005, but close to 7 percent of firms covered by the survey reported revenues of $100 million or more.

Table 5
Biosciences Companies by Ownership

	Number	Percent
Public	19	17.6
Private	89	82.4
Total	108	100.0

Table 6
Employment, Facilities, and Revenues of
Surveyed Biosciences Companies in Georgia

	Number of Companies	Percent
Paid employees in Georgia		
1 to 10	50	46.3
11 to 20	18	16.7
21 to 50	13	12.0
51 to 100	8	7.4
101 to 250	12	11.1
More than 250	7	6.5
Total	108	100.0
Facilities size (sq. ft.)		
Missing	2	1.9
Less than 10,000	56	51.9
10,000 - 50,000	32	29.6
51,000 - 100,000	11	10.2
101,000 or more	7	6.5
Total	108	100.0
Revenues ($ millions)		
Missing	4	3.7
$10 or less	76	70.4
$11 to $25	9	8.3
$26 to $50	4	3.7
$51 to $100	8	7.4
$101 to $500	4	3.7
More than $500	3	2.8

Company Focus

108 SURVEYED COMPANIES

Out of 108 bioscience companies covered by the survey, most are active in R&D and manufacturing, with many also running sales operations and medical and diagnostic laboratories. Among manufacturing firms, most are therapeutics and biopharmaceutical manufacturers, with medical devices makers also well represented. The same is true for research and development firms, although, in this sector, diagnostics firms also have a strong presence.

Since the industry breakdown question allowed respondents to select multiple industry sectors, it is helpful to examine industry combinations as they were reported by the survey. The most striking finding is the pivotal role of R&D operations, present both as a sole area of activity and in combination with other industries. R&D was the most frequently selected industry sector among the companies covered by the survey.

Company focus naturally divides the biosciences spectrum into discrete groups of companies that have different operations, production stages, and product approval processes. The three major groups are: BIO-PHARM, which includes therapeutics, biopharmaceuticals, and biologics companies; BIO-DEVICES, which covers companies that combine a BIO-

Table 7
Biosciences Industry by Industry Sector

Industry Sector	Number of Responses
Manufacturing	64
R&D	66
Medical and diagnostic laboratories	18
Blood and organ banks	3
Sales	25
Other	5
Total	108

PHARM and medical devices focus; and DIAGNOSTICS. The BIO-PHARM group is the largest and includes 53 companies (49 percent of the sample) that often pair their primary focus with platform technologies. In addition, this group is supplemented by 12 companies that focus on BIO-DEVICES and platform technologies. The group of 27 medical devices companies (DEVICES), which most commonly pair a medical devices focus with diagnostics and platform technologies, constitute 25 percent of the sample. The next group of 16 companies (15 percent of the total) is dominated by DIAGNOTICS firms, and also includes companies that focus on platform and general research technologies. (See Table 9.)

While BIO-PHARM and DEVICES firms are most likely to be involved in manufacturing and R&D, R&D is the most common industry for companies in the combined BIO-DEVICES and DIAGNOSTICS groups. Ten BIO-PHARM com-

Table 8
Biosciences Companies by Industry and Industry Combinations

Industry	Number of Companies	Percent of Total
Research and Development (R&D)	24	24.5
Manufacturing	25	24.5
R&D and Manufacturing	16	14.2
Sales, R&D, Manufacturing	9	8.5
Medical and Diagnostic Laboratories	4	3.8
Sales	3	2.8
Sales, R&D	5	2.8
Sales,Laboratories, R&D, Manufacturing	3	2.8
Laboratories, Manufacturing	4	2.8
R&D, Other Industries	2	1.9
Other industries, Manufacturing	1	1.9
Other industries, Manufacturing, R&D	1	
Manufacturing, Sales	3	2.8
Blood and Organ Banks, Laboratories, R&D	2	1.9
Other industries	1	0.9
Sales, Laboratories, R&D	1	0.9
Blood and organ banks, Laboratories, Sales, R&D	1	0.9
Laboratories, R&D	2	0.9
Laboratories, R&D, Manufacturing	1	0.9
Total	108	100.0

Table 9
Companies Grouped by Focus
(108 Surveyed Companies)

	BIO-PHARM		BIO-DEVICES	
	Number of Responses	Percent of Group Total	Number of Responses	Percent of Group Total
Manufacturing	33	62.3	6	50.0
R&D	33	62.3	8	66.7
Medical and diagnostic labs	5	9.4	4	33.3
Blood and organ banks	3	5.7		0.0
Sales	10	18.9	1	8.3
Other	2	3.8	1	8.3
Companies in group	53	100.0	12	100.0
Percent of all companies		49.1		11.1

	DEVICES		DIAGNOSTICS	
	Number of Responses	Percent of Group Total	Number of Responses	Percent of Group Total
Manufacturing	20	74.1	5	31.3
R&D	15	55.6	10	62.5
Medical and diagnostic labs	4	14.8	5	31.3
Blood and organ banks		0.0		0.0
Sales	12	44.4	2	12.5
Other	2	7.4		0.0
Companies in group	27	100.0	16	100.0
Percent of all companies		25.0		14.8

Table 10
Revenues by Company Focus

	BIO-PHARM	BIO-DEVICES	DEVICES	DIAGNOSTICS
Missing	2	2		
$10 Mil. or less	33	8	22	13
$11 Mil to $25 Mil	6	0	3	0
$26 Mil. to $50 Mil.	2	0	1	1
$51 Mil. to $100 Mil.	6	1	0	1
$101 Mil. to $500 Mil.	2	1	0	1
More than $500 Mil.	2	0	1	0
Total	53	12	27	16

panies generated more than $50 million in revenues in 2005, but 33 companies made $10 million or less sales range. The BIO-DEVICES group had two companies that made over $50 million, but again, the rest reported revenues in the lowest range ($10 million or less). While over 80 percent of the DEVICES and DIAGNOSTICS groups belong in the lowest range of the reported 2005 revenues, two companies in DIAGNOSTICS and one in DEVICES earned more than $50 million. Significantly, three firms—two in BIO-PHARM and one in the DEVICES group—reported revenues of more than $500 million in 2005. (See Table 10.)

University Affiliations

76 RESPONDING COMPANIES

Since over 60 percent of the 108 companies covered by the survey are involved in research and development, it is not surprising that 50 percent of the 76 survey respondents reported they were university-affiliated. Over half of the universities named are Georgia institutions, most of which are located in the "Atlanta Research Triangle" of Georgia Tech, Emory, and Georgia State. Four respondents cited The Medical College of Georgia in Augusta, two had ties to the University of Georgia, and Georgia Southern University was host to one respondent. Other southern institutions in Texas, Florida, North Carolina, and Alabama were also mentioned as well as Harvard, George Washington University, and schools in Europe and Israel. It is also worth noting that 49 percent of the respondents consider proximity to academic institutions as either critical or very important in their decisions to locate in Georgia, and only 13 percent consider it unimportant.

Product Development

76 RESPONDING COMPANIES

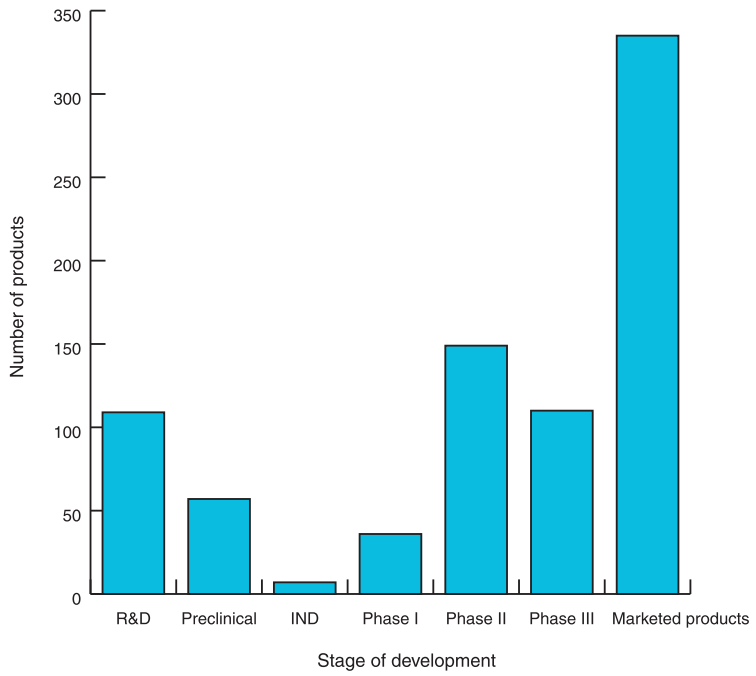
One solid measure of vitality of the biosciences sector is the number of marketed products, and the number of products currently being developed. The 76 biosciences companies that responded to the survey reported an impressive array of 677 marketed products, and 555 products under development.

In the group of 42 therapeutics BIO-PHARM and BIO-PHARM/DEVICES companies, 470 products are in various stages of development or approval, and 335 products are already available. Since an average of one out of every five compounds that enters clinical trials receives subsequent approval, survey respondents are likely to see 59 new applications enter the market over the next eight years. In the long run, however, the relatively low number of products in the R&D and preclinical stages may be a cause of concern, since very few compounds under development even make it to clinical trials. So, this particular metric needs to be monitored closely to ensure the continued health of Georgia's biosciences industry.

Table 11
Respondents by Company Focus

Focus	Number of Companies
BIO-PHARM	31
BIO-DEVICES	11
DEVICES	25
DIAGNOSTICS	9
Total	76

Biopharmaceutical Products Under Development, 2006



Among the companies (mainly medical devices, diagnostics, and industrial/agricultural firms) whose products do not require a lengthy drug approval process, 85 products are in various stages of development, and 342 products are already marketed. An additional 282 products are to be marketed within the next five years, a very impressive 140 percent jump from the current level. Meanwhile, 38 products are slated to hit the market in five years or more. Even more remarkably, the totals do not include the 5,000 products under development and the 12,000 available products reported by just one company.

Cancer, inflammation, and pain are the main targets for companies in the BIO-PHARM and BIO-DEVICES groups, but anti-infective and antiviral drugs and applications are the second most often reported kinds of products. The DIAGNOSTICS group focuses on anti-infective, immunological, metabolic, and cancer treatments. DEVICES firms, on the other hand, tend to specialize in general, restorative, and neurological products, with a strong presence in cardiovascular and respiratory areas. Cell analysis and separation is the most commonly used technology among the platform technology and discovery firms.

Table 12
Product Development by Company Focus

Development Stage	Number of Products
BIO-PHARM and BIO-DEVICES	
R&D	109
Preclinical	59
IND	7
Phase I	36
Phase II	149
Phase III	110
Marketed products	335
In development	470
In discovery	175
In clinical trials	295
DEVICES and DIAGNOSTICS	
In development	85
Marketed products	342
TOTAL	
In discovery/approval	555
Marketed products	677

Based on group of 76 respondents.

Half of the respondents manufacture some or all of their marketed products in Georgia. For the 16 drug manufacturers, products dealing with inflammation, pain, neurological, and gastrointestinal conditions are the mainstays. Among the 20 medical devices manufacturers, general, restorative, and neurological devices and reproductive, abdominal, and radiological devices are the main products.

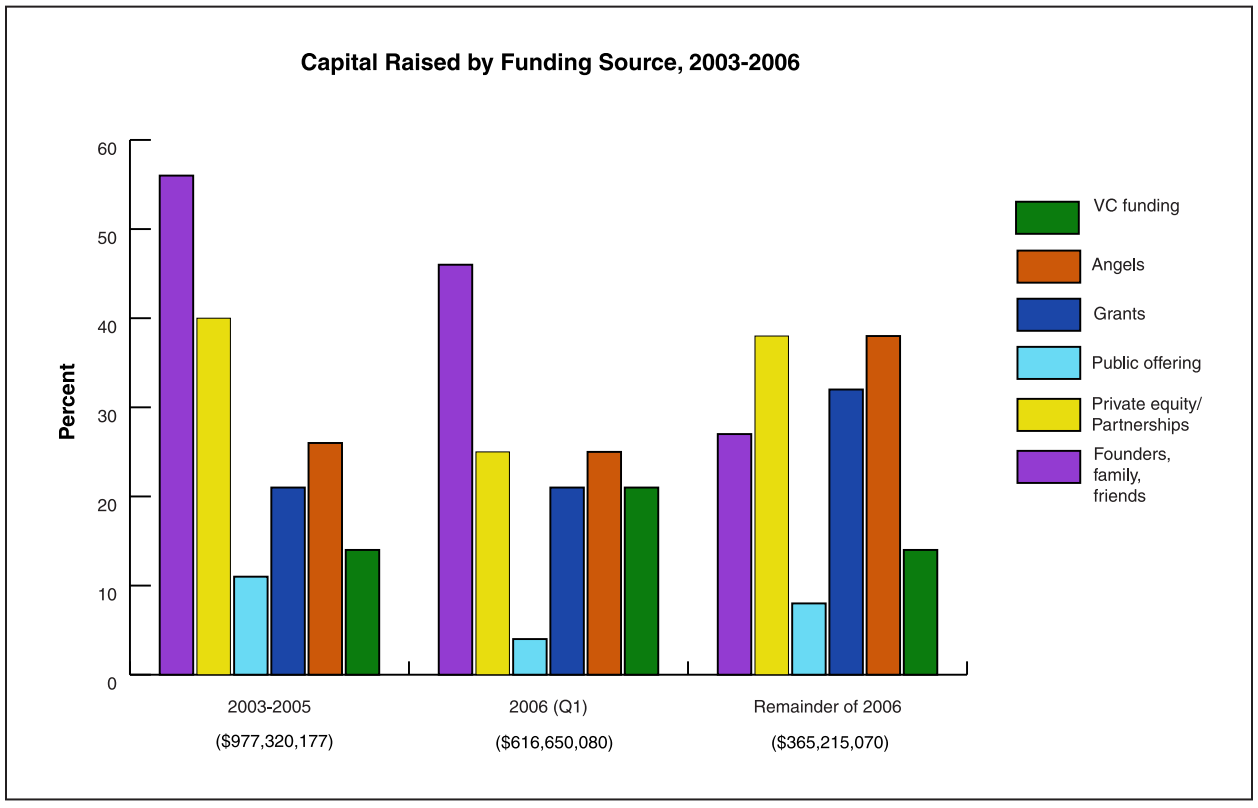
Funding

76 RESPONDING COMPANIES

Among the survey respondents, 52 percent reported net losses in 2005. Among the manufacturing-heavy pharmaceuticals group, however, only 42 percent operated at a loss. The percentage was higher for pharmaceutical firms involved in product development (55 percent). Most of firms in the R&D-heavy medical devices and diagnostics groups were even more likely to operate at a loss. Among the 31 companies that did report income, 24 companies were in the lowest category (up to $5 million), but three had incomes of $50 million or more in 2006.

The operations of biopharmaceutical firms involved in product development differ from pharmaceutical manufacturing and other biosciences branches in terms of high development costs and a long approval process. Since the product development and approval process averages 15 years before the product hits the market, access to capital is a major obstacle. This is true especially for young companies with no marketed products.

Although access to capital is cited as the most serious challenge by 48 percent of the respondents, growth in industry funding in Georgia has been impressive over the last three years. The survey respondents reported over $977 million in capital raised between 2003 and 2005, $617 million already generated in the first quarter of 2006, and that they expect to raise another $365 million in the remaining months of 2006. Founders, family and friends, private equity, partnerships, and angels were the most often reported sources of funding. The role of venture capital funding, grants, and public offerings is consistently growing, however.



The shift in the composition of capital sources from founders and family and friends in 2003-2005 towards venture capital funding, public offerings, grants, and angels in 2006 is a sign that the biosciences industry in Georgia is maturing. While six public offerings were reported between 2003 and 2005, four are expected in 2006 alone, (one is already completed). The jump in venture capital funding is even more striking. While eight of the respondents secured venture capital funding between 2003 and 2005, six secured venture capital in the first quarter of 2006 with an additional ten deals expected in the remainder of 2006. If these expectations are realized, 2006 will be a record year for the industry in respect to the number of venture capital deals secured.

Although the value of venture capital invested in U.S. biotechnology firms is steadily increasing, the percentage of financing it provides dropped from 15 percent in 2002 to just over 10 percent in 2005. The funding provided by partnering deals, on the other hand, consistently grew not only in value (from close to $6 billion in 1999 to $17.3 billion in 2005), but also in its share of biotechnology funding. In 2005, partnering deals provided close to 50 percent of the industry's funding.

The survey results clearly indicate the growing importance of partnering agreements in Georgia. While 40 percent of respondents reported private equity and partnering deals as their sources of funding between 2003 and 2005, 25 percent raised money from these sources in just the first quarter of 2006, with 38 percent of respondents counting on private equity and partnering funds in the remainder of 2006 (percentages refer to valid responses only). Meanwhile, 63 percent of respondents currently seek partnering opportunities. Obviously, the increasing importance of partnering, together with the trend towards consolidation within the pharmaceutical and biotechnology industries, is likely to escalate the pressure on young companies to relocate closer to their partners and investors.

Georgia's Business Climate

76 RESPONDING COMPANIES

Biosciences firms have become an object of intense competition among states and regions, and lucrative incentive packages often succeed in attracting successful and promising ones. The Life Sciences Industry Survey offers a great opportunity to learn how the top executives of the 76 responding companies assess the situation of their industry in Georgia.

The quality of life, proximity to academic institutions, and the availability of a skilled labor force were most often cited as very important or critical reasons for setting up operations in Georgia (according to 59 percent, 49 percent, and 45 percent of respondents, respectively). The business-friendly legislative environment was cited by over 37 percent of respondents.

Access to capital was singled out as a very important or critical challenge by 45 percent of respondents, with 30 percent of respondents equally concerned about the availability of a skilled labor force. The lack of a skilled labor force was considered a problem by companies in R&D and manufacturing.

While 59 percent of respondents said the quality of life was the most important reason for setting up operations in Georgia, 45 percent of respondents noted that traffic congestion was a very important or critical infrastructure issue. Another 25 percent of respondents considered the airport as a main infrastructure issue, and some specifically called for a second airport in Atlanta.

Capital formation and taxes were the most important legislative issues to 26 percent of respondents, while bioethics and tort reform were of equal concern to 20 percent and 18 percent of respondents, respectively. Air quality, the quality of schools and education, the evolution versus creation debates, illegal immigration, and overregulation were all cited as other important legislative issues.

Because manufacturing is essential to the life sciences industry, executives' views about manufacturing-related issues are especially important. In their decisions to manufacture in Georgia, survey respondents most commonly cited the availability and cost of labor as very important, infrastructure as moderately important, and the cost of land and regulatory challenges as not important. A sizable group did consider regulatory challenges as very important in their decision to manufacture in Georgia, however. Among the broader group of respondents who answered questions about the decision to locate in Georgia, over 43 percent considered the availability of facilities as very important, or even critical.

Appendix: Frequency Tables

108 SURVEYED COMPANIES

108 Surveyed Companies

Year the company was founded

	Count	%
Missing of NA	10	9.3%
1826	1	0.9%
1907	1	0.9%
1920	1	0.9%
1954	2	1.9%
1964	1	0.9%
1967	1	0.9%
1968	1	0.9%
1971	1	0.9%
1975	4	3.7%
1976	1	0.9%
1980	3	2.8%
1981	3	2.8%
1982	4	3.7%
1983	1	0.9%
1984	3	2.8%
1985	2	1.9%
1986	2	1.9%
1987	5	4.6%
1988	1	0.9%
1991	3	2.8%
1992	3	2.8%
1993	1	0.9%
1994	5	4.6%
1995	2	1.9%
1996	3	2.8%
1997	6	5.6%
1998	6	5.6%
1999	4	3.7%
2000	6	5.6%
2001	4	3.7%
2002	2	1.9%
2003	5	4.6%
2004	6	5.6%
2005	4	3.7%
Total	108	100.0%

Number of paid employees in Georgia

	Count	%
1 to 10	50	46.3%
11 to 20	18	16.7%
21 to 50	13	12.0%
51 to 100	8	7.4%
101 to 250	12	11.1%
More than 250	7	6.5%
Total	108	100.0%

Industry classification

Cases						
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
	108	100.0%	0	0.0%	108	100.0%

Industry classification

	Responses		Percent of Cases
	N	Percent	
Manufacturing	64	35.4%	59.3%
R&D	66	36.5%	61.1%
Medical and	18	9.9%	16.7%
Blood and organ	3	1.7%	2.8%
Sales	25	13.8%	23.1%
Other	5	2.8%	4.6%
Total	181	100.0%	167.6%

Company focus

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
Company focus	108	100.0%	0	0.0%	108	100.0%

Company focus

	Responses		Percent of Cases
	N	Percent	
Therapeutics	43	20.3%	39.8%
Medical devices	39	18.4%	36.1%
Biopharmaceuticals	37	17.5%	34.3%
Biologicals	16	7.5%	14.8%
Industrial/Agricultur	5	2.4%	4.6%
Diagnostics	28	13.2%	25.9%
Platform	32	15.1%	29.6%
General research	8	3.8%	7.4%
Other	4	1.9%	3.7%
Total	212	100.0%	196.3%

Approximate square footage of facilities in Georgia

	Facilities footage	
	Count	%
Missing	2	1.9%
Less than 10,000	56	51.9%
10,000 - 50,000	32	29.6%
51,000 - 100,000	11	10.2%
101,000 or more	7	6.5%
Total	108	100.0%

Is your company publicly traded

	Count	%
Yes	19	17.6%
No	89	82.4%
Total	108	100.0%

FY 2005 Revenue

	Count	%
Missing or NA	4	3.7%
$10 Mil. or less	76	70.4%
$11 Mil to $25 Mil	9	8.3%
$26 Mil. to $50 Mil.	4	3.7%
$51 Mil. to $100 Mil.	8	7.4%
$101 Mil. to $500 Mil.	4	3.7%
More than $500 Mil.	3	2.8%
Total	108	100.0%

Appendix: Frequency Tables

76 RESPONDING COMPANIES

76 Responding Companies

Years in business in Georgia

	Count	%
One year or less	1	1.3%
From 1 to 3 years	16	21.1%
Between 3 and 5 years	10	13.2%
Between 5 and 10 years	21	27.6%
More than 10 years	28	36.8%
Total	76	100.0%

Year the company was founded

	Count	%
Missing	2	2.6%
1907	1	1.3%
1920	1	1.3%
1954	1	1.3%
1967	1	1.3%
1968	1	1.3%
1971	1	1.3%
1975	2	2.6%
1982	3	3.9%
1983	1	1.3%
1984	3	3.9%
1985	1	1.3%
1986	1	1.3%
1987	5	6.6%
1988	1	1.3%
1991	3	3.9%
1992	2	2.6%
1993	1	1.3%
1994	3	3.9%
1996	3	3.9%
1997	5	6.6%
1998	5	6.6%
1999	4	5.3%
2000	6	7.9%
2001	3	3.9%
2002	1	1.3%
2003	5	6.6%
2004	6	7.9%
2005	4	5.3%
Total	76	100.0%

University affiliations

	Count	%
No university affiliations	38	50.0%
University affiliations	38	50.0%
Total	76	100.0%

Number of paid employees in Georgia

	Count	%
1 to 10	44	57.9%
11 to 20	12	15.8%
21 to 50	6	7.9%
51 to 100	6	7.9%
101 to 250	5	6.6%
More than 250	3	3.9%
Total	76	100.0%

Paid employees in Georgia (companies hiring more than 250 employees)

	Count	%
Missing or NA	74	97.4%
340	1	1.3%
800	1	1.3%
Total	76	100.0%

Industry classification (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
Industry classification	76	100.0%	0	0.0%	76	100.0%

Industry classification

	Responses		Percent of Cases
	Number	Percent	
Manufacturing	38	27.9%	50.0%
R&D	54	39.7%	71.1%
Medical and diagnostic	13	9.6%	17.1%
Blood and organ banks	3	2.2%	3.9%
Sales	23	16.9%	30.3%
Other	5	3.7%	6.6%
Total	136	100.0%	178.9%

Company focus (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
Company focus	76	100.0%	0	0.0%	76	100.0%

Company focus

	Responses		Percent of Cases
	Number	Percent	
Therapeutics	23	13.3%	30.3%
Medical devices	36	20.8%	47.4%
Biopharmaceuticals	35	20.2%	46.1%
Biologicals	13	7.5%	17.1%
Industrial/Agricultural	3	1.7%	3.9%
Diagnostics	20	11.6%	26.3%
Platform technologies/Product discovery	32	18.5%	42.1%
General research technologies	8	4.6%	10.5%
Other	3	1.7%	3.9%
Total	173	100.0%	227.6%

Biopharmaceutical companies focus (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$Biopharmaceutical	35	46.1%	41	53.9%	76	100.0%

Biopharmaceutical companies focus

	Responses		Percent of Cases
	N	Percent	
Neuropharmacological	9	10.6%	25.7%
Cardio-Renal	8	9.4%	22.9%
Metabolic/Endocrine	5	5.9%	14.3%
Gastrointestinal/Coagulation	4	4.7%	11.4%
Medical imaging/Radiopharmaceutical	2	2.4%	5.7%
Anti-infective	10	11.8%	28.6%
Inflamatory/Analgesic/Ophthalmologic	11	12.9%	31.4%
Oncologic	11	12.9%	31.4%
Pulmonary	4	4.7%	11.4%
Anesthetic/Critical Care	1	1.2%	2.9%
Reproductive/Urologic	5	5.9%	14.3%
Anti-Viral	7	8.2%	20.0%
Pathogen/Immunologic	4	4.7%	11.4%
Dermatologic/Dental	3	3.5%	8.6%
Other	1	1.2%	2.9%
Total	85	100.0%	242.9%

Diagnostics companies focus (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$Diagnostic(a)	19	25.0%	57	75.0%	76	100.0%

Diagnostics companies focus

	Responses		Percent of Cases
	Number	Percent	
Neuropharmacological	4	8.5%	21.1%
Cardio-Renal	2	4.3%	10.5%
Metabolic/Endocrine	5	10.6%	26.3%
Gastrointestinal/Coagulation	2	4.3%	10.5%
Medical imaging/Radiopharmaceutical	4	8.5%	21.1%
Anti-infective	5	10.6%	26.3%
Inflamatory/Analgesic/Ophthalmologic	2	4.3%	10.5%
Oncologic	4	8.5%	21.1%
Pulmonary	3	6.4%	15.8%
Anesthetic/Critical Care	3	6.4%	15.8%
Reproductive/Urologic	3	6.4%	15.8%
Anti-Viral	2	4.3%	10.5%
Pathogen/Immunologic	5	10.6%	26.3%
Dermatologic/Dental	1	2.1%	5.3%
Other	2	4.3%	10.5%
Total	47	100.0%	247.4%

Device company focus (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$Device(a)	36	47.4%	40	52.6%	76	100.0%

Device company focus

	Responses		Percent of Cases
	Number	Percent	
General, restoriative, neurolog.	16	26.2%	44.4%
Cardiovascular and respiratory	10	16.4%	27.8%
Reproductive, abdominal and radiological	8	13.1%	22.2%
Clinical laboratory devices	6	9.8%	16.7%
Ophthalmic and ENT	4	6.6%	11.1%
Dental, infection control, hospital	7	11.5%	19.4%
Other	10	16.4%	27.8%
Total	61	100.0%	169.4%

Platform technology companies focus (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$Platrofrmtech(a)	30	39.5%	46	60.5%	76	100.0%

Platform technology companies focus

	Responses		Percent of Cases
	Number	Percent	
Microchip technology	2	5.9%	6.7%
Cell analysis and separation	10	29.4%	33.3%
Microfluidic based	3	8.8%	10.0%
Nanotechnology	5	14.7%	16.7%
Other	14	41.2%	46.7%
Total	34	100.0%	113.3%

Approximate square footage of facilities (GA)

	Facilities footage	
	Count	%
Missing	2	2.6%
Less than 10,000	43	56.6%
10,000 - 50,000	20	26.3%
51,000 - 100,000	6	7.9%
101,000 or more	5	6.6%
Total	76	100.0%

Number of products per development stage

	R&D	Preclinical	IND	Phase I	Phase II	Phase III	Marketed products
	Count	Count	Count	Count	Count	Count	Count
Missing or NA	12	12	12	12	12	12	12
0	20	37	58	51	49	54	32
1	5	8	4	7	8	6	11
2	15	10	1	4	4	1	4
3	5	3	1	1		1	2
4	7	5			1		1
5	5						2
6							1
7	1						
8	1						
10	3					1	4
12					1		
15		1					
18							1
20				1			
25	1						
34							1
40							1
90						1	
100							2
120					1		
300							1
5,000	1						
12,000							1
Total	76	76	76	76	76	76	76

	Clinical trials outsourced in Georgia		Clinical trials outsourced to other states	
	Count	%	Count	%
Missing or NA	72	94.7%	63	82.9%
20 percent	1	1.3%		
50 percent	2	2.6%	3	3.9%
80 percent			1	1.3%
100 percent	1	1.3%	9	11.8%
Total	76	100.0%	76	100.0%

Number of new products to be marketed (time to market)

	In 6 months or less		6 to 12 months		1 to 3 years		3 to 5 years		5 years +
	Count	%	Count	%	Count	%	Count	%	Count
Missing or NA	16	21.1%	16	21.1%	16	21.1%	16	21.1%	16
0	40	52.6%	31	40.8%	24	31.6%	41	53.9%	50
1	10	13.2%	12	15.8%	11	14.5%	7	9.2%	1
2	4	5.3%	11	14.5%	10	13.2%	5	6.6%	3
3	3	3.9%	3	3.9%	3	3.9%	4	5.3%	1
4	2	2.6%	1	1.3%	5	6.6%			2
5			1	1.3%	3	3.9%			2
6					1	1.3%			
10					2	2.6%	1	1.3%	1
15					1	1.3%	1	1.3%	
25							1	1.3%	
1,000	1	1.3%							
1,500			1	1.3%					
Total	76	100.0%	76	100.0%	76	100.0%	76	100.0%	76

Percentage of products manufactured in Georgia

	Count	%
Missing or NA	14	18.4%
None	24	31.6%
0 to 25%	2	2.6%
26% to %50	1	1.3%
%51 to 75%	5	6.6%
76% to 100%	30	39.5%
Total	76	100.0%

Type of marketed drugs currently manufactured in Georgia (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$DrugsManGa(a)	16	21.1%	60	78.9%	76	100.0%

Type of marketed drugs currently manufactured in Georgia

	Responses		Percent of Cases
	Number	Percent	
Neuropharmacological	3	15.0%	18.8%
Cardio-Renal	1	5.0%	6.3%
Gastrointestinal/Coagulation	3	15.0%	18.8%
Anti-infective	1	5.0%	6.3%
Inflamatory/Analgesic/Ophthalmologic	4	20.0%	25.0%
Pulmonary	1	5.0%	6.3%
Anesthetic/Critical Care/Addiction	2	10.0%	12.5%
Reproductive/Urologic	1	5.0%	6.3%
Pathogen/Immunologic	1	5.0%	6.3%
Dermatologic/Dental	1	5.0%	6.3%
Other	2	10.0%	12.5%
Total	20	100.0%	125.0%

Type of marketed medical devices currently manufactured in Georgia (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$DevcmanGA(a)	20	26.3%	56	73.7%	76	100.0%

Type of marketed medical devices currently manufactured in Georgia

	Responses		Percent of Cases
	Number	Percent	
General, restoriative and neurological	9	37.5%	45.0%
Cardiovascular and respiratory	2	8.3%	10.0%
Reproductive, abdominal and radiological	4	16.7%	20.0%
Clinical laboratory devices	2	8.3%	10.0%
Ophthalmic and ENT	1	4.2%	5.0%
Dental, infection control, hospital	3	12.5%	15.0%
Other	3	12.5%	15.0%
Total	24	100.0%	120.0%

Georgia manufacturing appeal

	Drug manufacturers		Device manufacturers		Other manufacturers	
	Count	%	Count	%	Count	%
Missing	22	28.9%	22	28.9%	22	28.9%
NA	30	39.5%	20	26.3%	47	61.8%
No appeal	5	6.6%	3	3.9%		
Low appeal	6	7.9%	8	10.5%	1	1.3%
Average appeal	7	9.2%	14	18.4%	3	3.9%
Appealing	4	5.3%	3	3.9%	2	2.6%
Very appealig	2	2.6%	6	7.9%	1	1.3%
Total	76	100.0%	76	100.0%	76	100.0%

Factors in decision to locate operations in Georgia

	Cost of land	Availability of labor	Infrastructure	Cost of labor	Availablity of facilities	Regulatory challenges
	Count	Count	Count	Count	Count	Count
Missing or NA	17	17	17	17	17	17
Not important	31	6	16	10	9	24
Slightly important	2	9	9	8	6	4
Moderately important	9	10	21	19	11	11
Very important	13	23	11	21	19	13
Extremely important/critical	4	11	2	1	14	7
Total	76	76	76	76	76	76

Factors in decision to manufacture in Georgia

	Cost of land	Availability of labor	Infrastructure	Cost of labor	Availability of facilities	Regulatory challenges
	Count	Count	Count	Count	Count	Count
Missing or NA	35	35	35	35	35	35
Not important	18	5	10	6	7	13
Slightly important	1	5	3	4	4	6
Moderately important	12	7	15	13	10	6
Very important	8	15	10	16	10	11
Extremely important/critical	2	9	3	2	10	5
Total	76	76	76	76	76	76

Is your company publicly traded

	Count	%
Yes	10	13.2%
No	66	86.8%
Total	76	100.0%

FY 2005 Revenue

	Count	%
Missing or NA	4	5.3%
$10 Mil. or less	57	75.0%
$11 Mil to $25 Mil	7	9.2%
$26 Mil. to $50 Mil.	2	2.6%
$51 Mil. to $100 Mil.	3	3.9%
$101 Mil. to $500 Mil.	1	1.3%
More than $500 Mil.	2	2.6%
Total	76	100.0%

FY 2005 Income

	Count	%
Missing or NA	5	6.6%
Loss	40	52.6%
$0 to $5 Mil.	24	31.6%
$6 Mil. to $10 Mil.	1	1.3%
$11 Mil. to $25 Mil.	3	3.9%
$50 Mil. or more	3	3.9%
Total	76	100.0%

Capital raised in 2003-2005

	Count	%
Missing or NA	18	23.7%
0	17	22.4%
20,000	1	1.3%
100,000	2	2.6%
200,000	1	1.3%
250,000	1	1.3%
400,000	1	1.3%
500,000	1	1.3%
550,000	1	1.3%
750,000	2	2.6%
850,000	1	1.3%
1,000,000	3	3.9%
1,150,000	1	1.3%
1,500,000	1	1.3%
2,000,000	4	5.3%
2,200,000	1	1.3%
3,000,000	2	2.6%
3,500,000	1	1.3%
4,000,000	1	1.3%
6,000,000	2	2.6%
7,000,000	1	1.3%
8,000,000	1	1.3%
8,500,000	1	1.3%
15,000,000	1	1.3%
20,000,000	1	1.3%
25,000,000	1	1.3%
30,000,000	1	1.3%
33,000,000	1	1.3%
35,000,000	1	1.3%
40,000,000	1	1.3%
60,000,000	1	1.3%
150,000,000	1	1.3%
200,000,000	1	1.3%
300,000,000	1	1.3%
Total	76	100.0%

Funding sources for capital raised in 2003-2005 (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$FundSrcs0305(a)	57	75.0%	19	25.0%	76	100.0%

Funding sources for capital raised in 2003-2005

	Responses		Percent of Cases
	Number	Percent	
Founders, family, friends	32	29.9%	56.1%
Private equity/Partnership	23	21.5%	40.4%
Public offering	6	5.6%	10.5%
Grants	12	11.2%	21.1%
Angels	15	14.0%	26.3%
VC funding	8	7.5%	14.0%
Early stage (Series A-B)	8	7.5%	14.0%
Mid stage (Series C-D)	2	1.9%	3.5%
Late stage (Series E)	1	0.9%	1.8%
Total	107	100.0%	187.7%

Capital raised in 2006

	Count	%
Missing or NA	11	14.5%
0	36	47.4%
10	8	10.5%
50,000	1	1.3%
100,000	1	1.3%
200,000	1	1.3%
250,000	1	1.3%
400,000	1	1.3%
500,000	2	2.6%
650,000	1	1.3%
750,000	1	1.3%
1,000,000	1	1.3%
1,500,000	2	2.6%
2,000,000	1	1.3%
2,250,000	1	1.3%
4,000,000	2	2.6%
5,000,000	1	1.3%
12,000,000	1	1.3%
30,000,000	1	1.3%
100,000,000	1	1.3%
450,000,000	1	1.3%
Total	76	100.0%

Funding sources for capital raised in 2006 (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$FundSrcs06(a)	28	36.8%	48	63.2%	76	100.0%

Funding sources for capital raised in 2006

	Responses		Percent of Cases
	Number	Percent	
Founders, family, friends	13	26.5%	46.4%
Private equity/Partnership	7	14.3%	25.0%
Public offering	1	2.0%	3.6%
Grants	6	12.2%	21.4%
Angels	7	14.3%	25.0%
VC funding	6	12.2%	21.4%
Early stage (Series A-B)	6	12.2%	21.4%
Mid stage (Series C-D)	1	2.0%	3.6%
Late stage (Series E)	2	4.1%	7.1%
Total	49	100.0%	175.0%

Capital to be raised in the remainder of 2006

	Count	%
Missing or NA	19	25.0%
0	27	35.5%
65,000	1	1.3%
100,000	3	3.9%
250,000	1	1.3%
500,000	1	1.3%
600,000	1	1.3%
1,000,000	1	1.3%
1,500,000	1	1.3%
2,000,000	4	5.3%
2,500,000	1	1.3%
3,000,000	1	1.3%
4,000,000	1	1.3%
5,000,000	2	2.6%
6,000,000	1	1.3%
10,500,000	1	1.3%
12,000,000	1	1.3%
14,000,000	2	2.6%
15,000,000	2	2.6%
20,000,000	2	2.6%
35,000,000	1	1.3%
72,000,000	1	1.3%
100,000,000	1	1.3%
Total	76	100.0%

Funding sources for capital to be raised during remainder of 2006 (multiple response)						
	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$FundSrcs06r(a)	37	48.7%	39	51.3%	76	100.0%

Funding sources for capital to be raised during remainder of 2006 (multiple response question)

	Responses		Percent of Cases
	Number	Percent	
Founders, family, friends	10	13.9%	27.0%
Private equity/Partnership	14	19.4%	37.8%
Public offering	3	4.2%	8.1%
Grants	12	16.7%	32.4%
Angels	14	19.4%	37.8%
VC funding	10	13.9%	27.0%
Early stage (Series A-B)	5	6.9%	13.5%
Mid stage (Series C-D)	3	4.2%	8.1%
Late stage (Series E)	1	1.4%	2.7%
Total	72	100.0%	194.6%

In-house strategies (multiple response question)

Inhouse stategies	Missing or NA	Count	4
		Percent	5.3%
	R&D	Count	55
		Percent	72.4%
	Clinical trials	Count	29
		Percent	38.2%
	Manufacturing	Count	32
		Percent	42.1%
	Sales/Marketing	Count	46
		Percent	60.5%
	Distribution	Count	26
		Percent	34.2%
Total		Count	76
		Percent	100.0%

Outsourcing strategies (multiple response question)

Outsourcing strategies	Missing or NA	Count	22
		Percent	28.9%
	R&D	Count	20
		Percent	26.3%
	Clinical trials	Count	25
		Percent	32.9%
	Manufacturing	Count	31
		Percent	40.8%
	Sales/Marketing	Count	27
		Percent	35.5%
	Distribution	Count	31
		Percent	40.8%
Total		Count	76
		Percent	100.0%

Currently seeking partnering opportunities

	Count	%
Missing or NA	3	3.9%
Yes	48	63.2%
No	25	32.9%
Total	76	100.0%

Reasons for conducting business in Georgia

	Proximity to academic institutions	Availability of skilled work force	Business-friendly legislative environment	Access to capital	Availability Quality of service providers	Quality of life	Other
	Count	Count	Count	Count	Count	Count	Count
Missing or NA	8	8	8	8	8	8	8
Not important	10	11	12	27	21	6	63
Slightly important	7	10	10	12	15	4	
Moderately important	14	13	18	7	15	13	
Very important	19	21	17	14	13	27	4
Extremely important/critical	18	13	11	8	4	18	1
Total	76	76	76	76	76	76	76

Challenges to conducting business in Georgia

	Access to capital	Availability of skilled work force	Cost of living	Infrastructure (traffic, water, etc.)	Space availability	Availability Quality of service providers	Legislative environment	Other
	Count	Count	Count	Count	Count	Count	Count	Count
Missing or NA	10	10	10	10	10	10	10	10
Not important	13	14	26	23	23	26	26	64
Slightly important	8	11	12	11	15	11	7	
Moderately important	11	18	19	19	15	19	17	
Very important	10	13	8	11	8	6	7	1
Extremely important/critical	24	10	1	2	5	4	9	1
Total	76	76	76	76	76	76	76	76

Most significant infrastructure issues

	Traffic	Energy	Airport	Water	Land use	Other
	Count	Count	Count	Count	Count	Count
Missing or NA	22	22	22	22	22	22
Not important	12	26	18	31	25	48
Slightly important	2	12	10	10	14	
Moderately important	6	10	7	9	9	
Very important	15	6	10	3	6	1
Extremely important/critical	19		9	1		3
Total	76	76	76	76	76	74

Most significant legislative issues

	Bioethics	Capital formation	Tax issues	Environmental regulations	Tort reform	Other
	Count	Count	Count	Count	Count	Count
Missing or NA	19	19	19	19	19	19
Not important	21	18	14	25	24	51
Slightly important	10	6	7	12	6	2
Moderately important	11	13	16	8	13	1
Very important	11	5	12	8	8	1
Extremely important/critical	4	15	8	4	6	2
Total	76	76	76	76	76	76

Support for applied masters programs in biotechnology (multiple response question)

	Cases					
	Valid		Missing		Total	
	Number	Percent	Number	Percent	Number	Percent
$ApplProg(a)	67	88.2%	9	11.8%	76	100.0%

Support for applied masters programs in biotechnology

		Responses		Percent of Cases
		Number	Percent	
Interested in:	Hiring graduates of applied programs	37	32.7%	55.2%
	Providing unpaid internships	29	25.7%	43.3%
	Providing paid internships	24	21.2%	35.8%
	Providing financial support to the progr	1	0.9%	1.5%
	No interest whatsoever	22	19.5%	32.8%
Total		113	100.0%	168.7%

Appendix

LIST OF 108 SURVEYED COMPANIES

Company	Location	
Abeome, Inc.	Athens, GA 30605	Respondent
Adagen Medical International, Inc.	Atlanta, GA 30303	
Aderans Research Institute	Marietta, GA 30067	Respondent
Advanced Applications Institute	Atlanta, GA 30336-1817	Covered
Advanced Technology	Dacula, GA 30019-2239	Covered
AerovectRx Corporation	Norcross, GA 30092	
Ajay North America, LLC	Powder Springs, GA 30127-0127	Covered
Alcott Chromatography, Inc.	Norcross, GA 30093	Respondent
Alimera Sciences, Inc.	Alpharetta, GA 30005	Respondent
Alliant Pharmaceuticals	Alpharetta, GA 30004	
Allied Dgnstc Imging Resources	Norcross, GA 30093	
Alpha Omega Engineering	Alpharetta, GA 30004	Respondent
Altea Therapeutics	Tucker, GA 30084	Respondent
American Clinical Laboratory	Tucker, GA 30084-3818	
American Medical Devices, Inc.	Atlanta, GA 30309-2309	
AMMI, Inc.	Martinez, GA 30907	
Ana-Gen Technologies, Inc.	Atlanta, GA 30303	Respondent
Analytical Development, Inc.	Lawrenceville, GA 30045	
Analytics, Inc.	Atlanta, GA 30318	
Angionics	Athens, GA 30602	
Any Test, Inc.	Kennesaw, GA 30144-4918	
Apeliotus Technologies, Inc.	Atlanta, GA 30306	Respondent
Applied PhytoGenetics, Inc. (APGEN)	Athens, GA 30602	Respondent
AptoTec	Athens, GA 30602	
Aqua Solutions, Inc.	Jasper, GA 30143	
Aruna Biomedical	Athens, GA 30602	Respondent
Athens Research and Technology, Inc.	Athens, GA 30604	Respondent
AtheroGenics, Inc.	Alpharetta, GA 30004	Respondent
Atlanta Biologicals, Inc.	Lawrenceville, GA 30043	
Atlanta Center for Medical Research	Atlanta, GA 30308	Respondent
Atlanta Pathology Professional	Atlanta, GA 30312-1220	
Atrium Imaging Group of America	Dalton GA, 30722-6062	
Augusta Laboratory, Inc.	Augusta, GA 30909-1807	
AuraZyme Pharmaceuticals, Inc.	Kennesaw, GA 30144	
AviGenics, Inc.	Athens, GA 30602	

Company	Location	
Axona	Atlanta, GA 30308	
Bard Medical Division (C.R. Bard)	Covington, GA 30014	Respondent
Bard Urological Division (C.R. Bard)	Covington, GA 30014	
Beocarta Romega, Inc.	Rome, GA 30161	
Biofisica LLC	Lawrenceville, GA 30044	Respondent
Biomedical Design, Inc.	Dunwoody, GA 30338	Respondent
Biomedical Disposal, Inc.	Norcross, GA 30092	Covered
Bioniche Animal Health USA, Inc.	Bogart, GA 30622	Covered
BioSante Pharmaceutical, Inc.	Smyrna, GA 30082	
BioSentry, Inc.	Stone Mountain, GA 30083	
BioStrategies	Marietta, GA 30068	Respondent
Biosystems, Inc.	Stone Mountain, GA 30087	Covered
Brace International Inc	Atlanta GA, 30325-0752	
BresaGen, Inc./Novocell, Inc.	Athens, GA 30605	Respondent
Bristol-Myers Squibb	Atlanta, GA 30326	Covered
Bruder Healthcare Company	Alpharetta, GA 30004	Respondent
Burdox, Inc.	Griffin, GA 30224-0030	
C A P S Pharmacy	Norcross, GA 30093-2979	Covered
Cancer Therapeutics, Inc.	Thomasville, GA 31792	Respondent
Cardinal Health, Snowden Pencer Products & Services	Tucker, GA 30084	
CardioMEMS, Inc.	Atlanta, GA 30308	Respondent
Cell Design, LLC	Smyrna, GA 30080	Respondent
Cell Dynamics, LLC	Smyrna, GA 30038	Respondent
Celliance	Norcross, GA 30092	
CeloNova BioSciences	Newnan, GA 30263	Respondent
Century Systems, Inc.	Atlanta, GA 30336	
Cerebral Vascular Applications, Inc.	Duluth, GA 30097	Respondent
CIBA Vision Corp.	Duluth, GA 30097	Covered
CIS Biotech, Inc.	Atlanta, GA 30307	Respondent
Clinical Laboratory Services	Winder, GA 30680-6771	
Clinical Support Services, Inc.	Atlanta GA, 30339-2050	
Clinimetrics Research Associates, Inc.	Atlanta, GA 30309	
Collgard Biopharmaceuticals	Atlanta, GA 30327	Respondent
Columbia Laboratories, Inc.	Marietta, GA 30067	Respondent
Corautus Genetics, Inc.	Atlanta, GA 30308	
CryoLife, Inc.	Kennesaw, GA 3014	Respondent
D S M Nutritional Products, Inc.	Pendergrass, GA 30567-0220	
Dade Behring, Inc.	Atlanta, GA 30354	Covered
Design Science, Inc.	Atlanta, GA 30306	
DMS Holdings, Inc.	Jesup, GA 31598-0547	
Doctors Laboratory, Inc.	Valdosta, GA 31604-4750	

Company	Location	
Dornier MedTech America	Kennesaw, GA 30144	
Effcon Laboratories, Inc.	Mariettta, GA 30065	Respondent
Elan Holdings, Inc. (Elan drug delivery)	Gainesville, GA 30504	Covered
Elekta Holdings U S, Inc.	Norcross GA, 30092-3011	
Emerble Clinic	Atlanta, GA 30322-1013	
EmTech Biotechnology Development, Inc.,	Atlanta, GA 30306	
Encompass Pharmaceutical Services, Inc.	Norcross, GA 30092	Respondent
Enviropac, LLC	Peachtree City, GA 30269-0295	
Enzymatic Deinking Technologies, LLC (EDT)	Norcross, GA 30093	
EPD International, Inc.	Statham, GA 30666	
ERBE USA, Inc.	Marietta, GA 30067	
ERMI, Inc.	Decatur GA, 30030-2225	
Essential Consultants, Inc.	Chamblee, GA 30341	
Ethicon	Atlanta, GA 30350	
ExtRx Corporation	Roswell, GA 30075	
Facet Technologies, LLC (Div. of Matria Healthcare)	Marietta, GA 30067	
Femasys	Suwanee, GA 30024	Respondent
First Horizon Pharmaceutical Corp.	Alpharetta, GA 30005	
FOB Synthesis, Inc.	Kennesaw, GA 30152	Respondent
GE Healthcare	Atlanta, GA 30342	
Gene Probe, Inc.	Atlanta, GA 30033	
GeneCure Biotechnologies	Atlanta, GA 30303	Respondent
geneRx+	Atlanta, GA 30306	
Genesis Technologies International, Inc.	Lawrenceville, GA 30045	
Genzyme Corporations	Roswell, GA 30075	
GeoVax, Inc.	Atlanta, GA 30306	Respondent
Given Imaging, Inc.	Norcross, GA 30093	
Glades Pharmaceuticals, Inc. (Div. of Stiefel Laboratories, Inc.)	Duluth, GA 30097	
Glass Horse Project, LLC	Watkinsville, GA 30677	
Global Cardiac Solutions	Snellville, GA 30078	
Graft Solutions, Inc.	Atlanta, GA 30305	
Guided Therapeutics	Norcross, GA 30071	Respondent
Health Discovery Corp.	Savannah, GA 31406	
HealthTronics Surgical Services, Inc.	Marietta, GA 30062	
Healthwatch Technologies, Inc	Atlanta GA, 30350-1809	
Horizon Molecular Medicine, LLC	Atlanta, GA 30338-6723	
Howmedica Osteonics	Atlanta, GA 30041	
Hygea	Norcross, GA 30092	Respondent
IIIrd Millennium, Inc.	Alpharetta, GA 30022	
Immucor, Inc.	Norcross, GA 30091	Covered

Company	Location	
Inhibitex, Inc.	Alpharetta, GA 30004	Respondent
Innogenetics, Inc.	Alpharetta, GA 30004	Respondent
Innovation Factory	Atlanta, GA 30097	
Insectigen	Athens, GA 30602	
KB Visions	Atlanta, GA 30328	
Kendall Healthcare Products	Augusta, GA 30903-0430	
Kiel Pharmaceuticals, Inc.	Gainesville, GA 30501	Covered
KPS Technologies	Atlanta, GA 30303	
Laboratory Corporation America	Columbus, GA 31904	
Lee Laboratories	Grayson, GA 30221	Respondent
Leven, Inc.	Bogart, GA 30622	Respondent
Lexicor Medical Technolgies	Augusta, GA	Respondent
LOC Scientific, Inc.	Buford, GA 30518	
Lxu Healthcare, Inc.	Tyrone GA, 30290-2153	Respondent
Marietta X-Ray Inc.	Marietta, GA 30060	
Mas, Inc.	Suwanee, GA 30024-1256	
Mddatacor, Inc.	Alpharetta, GA 30004	
Medex, Inc	Duluth , GA 30096-8321	
Medical Device Marketing	Duluth, GA 30096	Respondent
Medical Edge Technologies, Inc.	Atlanta GA, 30328-4692	
Medical Molecular Therapeutics, LLC	Lakemont, GA 30552	
Medical Specialty Innovations	Alpharetta, GA 30004-8421	
Merial Limited	Duluth, GA 30096	Respondent
Merial Select	Gainesville, GA 30503	
Metametrix, Inc.	Norcross, GA 30092-3024	
Metastatix	Norcross, GA 30092	Respondent
Metro Vascular PC	Decatur, GA 30033-6132	
Micro-Macro International, Inc.	Athens, GA 30607-1174	
Microtek Medical Holdings, Inc.	Alpharetta, GA 30004-6119	
Mikart, Inc.	Atlanta, GA 30318	Covered
Molecular Therapeutics, LLC	Athens, GA 30605	
Monsanto Company	Augusta, GA 30903-1707	
Montgomery Chemicals	Greensboro, GA 30642-8034	
Mullins Pathology & Cytology	Augusta, GA 30909	Respondent
Myelotec	Atlanta, GA	Respondent
Nanomist systems, LLC	Warner Robins, GA 31088	
National Diagnostics, Inc.	Atlanta, GA 30336	
Neotonus, Inc.	Marietta, GA 30060	Respondent
NeoVista, Inc.	Duluth, GA 30097	
Neural Signals, Inc.	Atlanta, GA 30340	Respondent

Company	Location	
NeuroTrials Research, Inc.	Atlanta, GA 30342	
Newton Laboratories Inc	Conyers, GA 30012-3493	
NitrOsystems	Augusta, GA 30901	
Noramco, Inc.	Athens, GA 30601-1645	Respondent
North American Science Associates	Kennesaw, GA 30152-7601	
Nova Biogenetics, Inc.	Atlanta, GA 30350-2522	Covered
Novoste Corporation	Norcross, GA 30093-3207	
Octogen Pharmacal Co., Inc.	Cumming, GA 30041-8274	Covered
Omega Bio-Tek, Inc.	Doraville, GA 30362	Respondent
Omni International, Inc.	Marietta, GA 30066	
Oncose, Inc.	Athens, GA 30602	
Orthonics, Inc.	Atlanta, GA 30332	Respondent
Osmetech Critical Care	Roswell, GA 30076	Respondent
P3 Laboratories	Winder, GA 30680	
Parexel	Lawrenceville, GA 30044	
Pathogen Control Associates	Norcross, GA 30092	
Pathology Consultants of Georgia	Dahlonega, GA 30533-1601	
Pfizer Corporation	Augusta, GA 30903	Covered
Pharm Data Inc/Premier Research	Marietta, GA 30066-7217	Covered
Phizer Inc./Pharmacia	Augusta, GA 30903	Covered
PhyGen	Athens, GA 30611	
Porex Porous Products Group	Fairburn, GA 30213	
Porex Surgical, Inc.	Newnan, GA 30265	
Precision Medical, Inc.	Hoschton, GA 30548	
Primagen, Inc.	Alpharetta, GA 30004	Respondent
Prizm Medical, Inc.	Duluth, GA 30096	Respondent
Proactive Labs, Inc.	Lithia Springs, GA	
Professional Formulators, Inc.	Douglas, GA 31534-0541	
Q Care International, LLC	Marietta, GA 30068-0011	
Quality Assurance Service Corp.	Augusta, GA 30917-2333	Covered
Quest Diagnostics	Tucker, GA 30084	Covered
Quintiles Laboratories Limited	Smyrna, GA 30082	
RayBiotech, Inc.	Norcross, GA 30092	
Recombinant Peptide Technologies, LLC (rPeptide)	Athens, GA 30605	
Reddy US Therapeutics, Inc.	Norcross, GA 30071	
Regent Medical Americas, LLC	Norcross ,GA 30092-2870	
Research Think Tank, Inc.	Alpharetta, GA 30004	
Respironics, Inc.	Kennesaw, GA 30144-3724	
RITA Medical Systems, Inc.	Manchester, GA 31816	Respondent
Rx PHI Beta Group S A, Inc.	Marietta, GA 30067-8752	Covered
S S S Company	Atlanta, GA 30315	Covered

Company	Location	
SaluMedica, LLC	Atlanta, GA 30307	Covered
ScheBo Biotech USA, Inc.	Marietta, GA 30064	
Scientific Adsorbents, Inc. (Div. of Apyron Technologies, Inc.)	Atlanta, GA 30316	Respondent
Sebia, Inc.	Norcross, GA 30093	Respondent
Sector Electronics, LLC	Acworth, GA 30102-3153	Respondent
Serologicals Corporation	Norcross, GA 30092	Respondent
Severn Trent Laboratories Inc	Savannah, GA 31404	
Shared Systems, Inc.	Martinez, GA 30907-2219	Respondent
Sigvaris, Inc.	Peachtree City GA, 30269-3019	
Skalar	Norcross, GA 30071	
Slainte Bioceuticals	Marietta, GA 30068	Respondent
Sleepmed, Inc.	Jonesboro, GA 30236-1169	
Smisson Cartledge Biomedical	Macon, GA 31201	Respondent
Smithkline Beecham Corp.	Columbus, GA 31909-6241	
SMO-USA, Inc.	Conyers, GA 30094	Respondent
Snowden Pencer, Inc.	Tucker, GA 30084	
Solvay Pharmaceuticals, Inc./ Unimed Pharmaceuticals, Inc.	Marietta, GA 30062	Covered
Somatocor	Atlanta, GA 30303	
Southeast Laboratories, Inc.	Athens, GA 30606	
Southeastern Pathology, PC	Rome, GA 30165-2723	
Southern Micro Instruments, Inc.	Marietta, GA 30067	
Southern Neurophysiology, LLC	Atlanta, GA 30004-1875	Covered
SpectRx, Inc.	Norcross, GA 30071	
Starkey Laboratories, Inc.	Norcross, GA 30093	
Sterimed, Inc.	Cartersville, GA 30120-6352	Respondent
Stheno Corporation	Atlanta, GA 30332	Respondent
Stiefel Laboratories, Inc.	Duluth, GA 30097-4330	Covered
Stradis Medical, LLC	Lawrenceville, GA 30045-2885	
Summit Industries, Inc.	Marietta, GA 30062	Respondent
Syntermed, Inc.	Atlanta, GA 30326	
Technical Products, Inc. of Georgia, USA	Decatur, GA 30035	Respondent
Technology Resource International Corporation (TRI)	Alpharetta, GA 30004	Respondent
Theragenics Corporation	Buford, GA 30518	Covered
Thione International, Inc.	Atlanta, GA 30305	
Trimex Medical Management, Inc.	Macon, GA 31201	Respondent
Trs Labs, Inc.	Athens, GA 30604	Covered
UCB Pharma, Inc.	Smyrna, GA 30080	Covered
UCB-Bioproducts, Inc.	Smyrna, GA 30080	
Ultra Scan, Inc.	Suwanee, GA 30024-8356	

Company	Location	
Unisplint Corporation	Norcross, GA 30093-1240	
UPPI (United Pharmacy Partners)	Suwanee, GA 30024-6056	Respondent
VersaPharm, Inc.	Marietta, GA 30062	
ViaGen, Inc.	Athens, GA 30605	
Viro-Med Laboratories, Inc.	Marietta, GA 30066-6037	Covered
Visionary Biomedical, Inc.	Roswell, GA 30076	
Vitalabs, Inc.	Jonesboro, GA 30236-6057	
Vivonetics, Inc.	Atlanta, GA 30332	
Warner Lambert (Pfizer)	Atlanta, GA 30338-7704	Covered
Wilden Plastics USA	Peachtree City, GA 30269	
Wingo, Inc.	Watkinsville, GA 30677	Covered
Worldwide Testingcom, Inc.	Atlanta, GA 30328	
Wynden Pharmaceuticals, LLC	Marietta, GA 30066	Respondent
Xytex Corp.	Augusta, GA 30904	Respondent
Z Technologies, LLC	Atlanta, GA 30345	
Zygogen, LLC	Atlanta, GA 30303	Respondent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