



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
**National Institutes of Health**



**National Institutes of Health Commercialization Assistance Program  
(NIH-CAP)**

# **NIH-CAP 2006-07**

## **Second Interval Tracking Report**

*for the period*

**April 1, 2008 - December 30, 2008**

## Table of Contents

<b>Background and Introduction.....</b>	<b>3</b>
The Tracking Form .....	3
Response Rate .....	4
<b>Commercialization Progress .....</b>	<b>4</b>
Activity in Partnerships and Deals .....	5
Commercial Revenue .....	9
Equity Funding .....	12
Employment growth.....	17
Mergers & Acquisitions .....	18
<b>CAP Impact.....</b>	<b>18</b>
Activity in Partnerships .....	18
Revenue .....	20
Equity Funding, Bank Loans and Other/Alternative Financing .....	21
<b>Summary .....</b>	<b>23</b>
<b>APPENDIX A .....</b>	<b>24</b>
<b>APPENDIX B.....</b>	<b>25</b>

# Background and Introduction

Larta tracks the progress of NIH-CAP participating companies for a baseline period, which spans the duration of the program, followed by two 9-month intervals for a total of 18 months after the program's completion. This report provides progress tracking results for the companies that participated in the CAP in 2006-07, for the second interval after the conclusion of that year's CAP period: April 1, 2008- December 31, 2008. The same set of companies was also tracked for the baseline period (September 1, 2006 to June 30, 2007), and first interval period (July 1, 2007 to March 31, 2008). The results of the baseline and first interval tracking have already been submitted to NIH. This report presents a summary of the data for the 2<sup>nd</sup> interval tracking period and includes some comparisons to previous years' results. Detailed source data may be found in a separate excel file (Processed Tracking 2006-07 Companies Second Interval.xls). Overall commercialization progress is discussed first and then comments concerning the perceived impact of CAP are provided.

During this tracking period, an economic crisis of historic proportions was starting to affect the business climate. Of greater relevance to emerging and small companies commencing or continuing their commercialization activities beyond the CAP, however, is the extent of the so-called credit crunch that was felt in full force by the conclusion of this tracking period. Credit lines from banks were beginning to be pulled back, lending was severely constricted (as reported both by the Federal Reserve and the business press, and as acknowledged by all economic indicators), and equity capital, specifically venture capital, dropped precipitously from previous levels. These provided for overall corrections of considerable magnitude. As this report demonstrates, however, these events did not affect CAP companies being tracked in this period more adversely when compared with the more benign effects faced by companies in earlier periods; however, it should be noted that for many companies being tracked, the full effects of this crisis may yet not be evident. The size of the companies being tracked may well insulate them from profound changes. After all, they are unlikely to be seeking public exits, or large rounds of institutional capital, where these negative effects are more acutely demonstrated. It is also clear that "bootstrapping" is a conventional response among small companies to a worsening economic climate.

## **The Tracking Form**

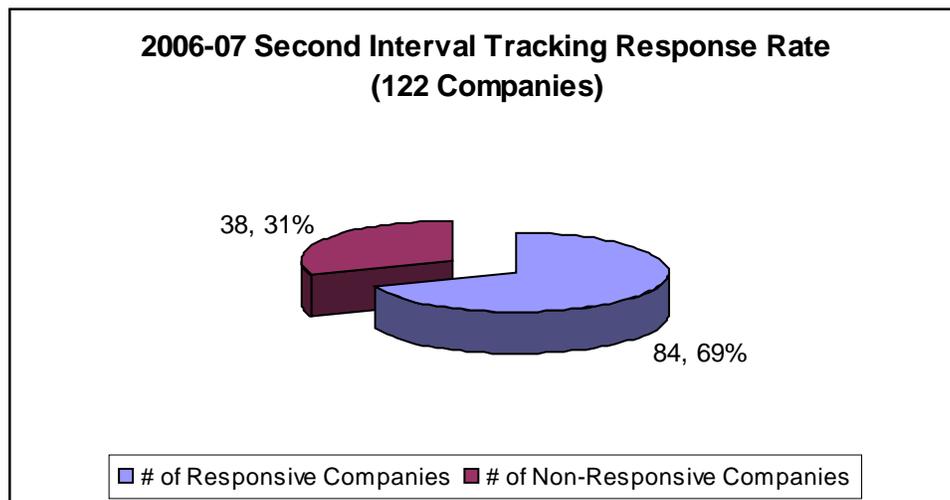
The third year of the CAP for NIH SBIR Phase II grantees was launched in July 2006. 125 companies completed the program in June 2007. At the end of the program, all 125 companies were sent baseline tracking forms. For the baseline period, 2 companies were relieved from tracking, leaving 123 companies to be tracked. For the first and second intervals, 122 out of these 123 were sent tracking forms; one company was excused from tracking due to their unwillingness to provide further tracking information(see Appendix A for detail). Some notable features of the tracking form (see Appendix B) are listed below:

- Tracking is focused on quantifiable end results, i.e., deals, revenue, increased equity investment, increased employment, M&A outcomes.
- In addition, the form defined a "deal activity pipeline". We hope that this attempt at quantifying complex and often circuitous commercialization efforts will provide some predictive capabilities in the future, somewhat analogous to sales pipeline forecasting.
- Participants were asked to report separately their overall commercialization progress and their evaluation of the CAP impact. Data on companies' commercialization progress are, in principle, objective and could be used to study the SBIR program performance in general; however, their use in evaluating CAP itself is limited due to the lack of a control group of SBIR companies.
- Data on CAP impact are indicative of CAP significance. Companies rated the CAP impact as 1) Major, 2) Valuable, 3) Little or No Impact.
- On the question covering revenue, companies were asked to provide the largest source of revenue; further, they were asked to explicitly indicate, separately, commercial revenue vs. revenue from R&D grants and contracts.

- Companies were classified into eight different categories based on their annual revenue, namely, 1) No Sales 2) less than \$50,000 3) \$50,000- \$99,999 4) \$100,000-\$499,999 5) \$500,000-\$999,999 6) \$1,000,000-\$4,999,999 7) \$5,000,000-\$999,999 8) \$10,000,000 and above. This change was made in response to an apparent reluctance to provide exact revenue figures in previous tracking efforts.
- The tracking form for the 2006-07 second interval period was modified from previous years in one section. Under Financing Activities, companies were asked to expressly state whether they were seeking equity investment, bank loan or line of credit, or other/alternative financing.
  - Under bank loan, companies were asked to state whether they were seeking a bank loan or other/alternative financing. This provides more clarity when analyzing CAP companies' financial activities and the type of financing they are seeking as well as gauging potential CAP impact on these activities.
- A note on CAP impact was inserted in the tracking form in order to provide consistency between companies' responses. This note was created in response to previous tracking experience when it was observed that companies often did not take into consideration the program's *indirect* influence on their commercialization progress.

### Response Rate

122 of the 2006-07 NIH-CAP companies were sent the second interval tracking form. 84 of the 122 companies responded to the tracking request; a 69% response rate. The response rate for the baseline period was 74%, and for the first interval period was 68%. A response rate between 65% and 70% is considered satisfactory, bearing in mind that more time has elapsed since the culmination of the CAP.



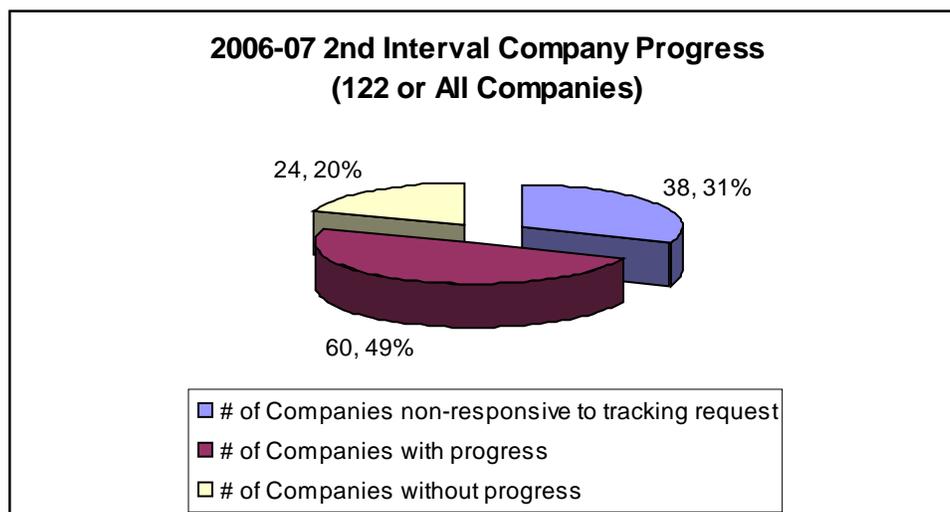
## Commercialization Progress

The following charts describe the progress that the companies have made during the first interval since the culmination of the CAP. Progress is determined by a positive change in the following categories:

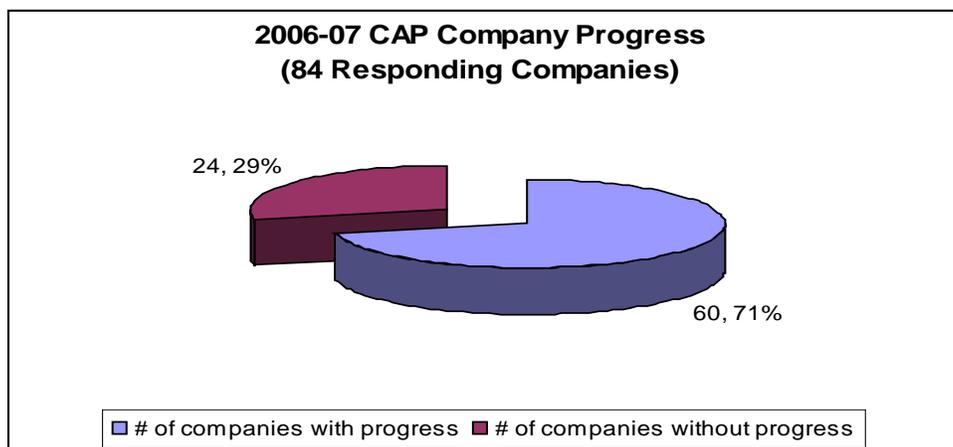
- Partnership and Deal-Related Activities
- Revenue
- Funding via Equity Investment, Banking or Other/Alternative Financing
- Growth in Employment
- Acquisitions

### **Activity in Partnerships and Deals**

The chart below outlines commercialization progress with respect to partnership and deal-related activities. As noted above, 84 companies of a total of 122 companies participating in the program responded. 60 companies or 49% of all participants (122) indicated commercialization progress in their partnership and deal related activities. This compares with 70 companies or 57% reporting such progress in the baseline period, and 65 companies or 53% reporting such progress in the 1<sup>st</sup> interval period,.



The chart below outlines commercialization progress with respect to partnership and deal-related activities, excluding the 38 companies that were non-responsive to the tracking request. Out of 84 companies that responded to the 2<sup>nd</sup> interval tracking request, an encouraging 60 companies or 71% indicated commercialization progress in the partnership and deal related activities area. However, the 71% rate is a decline when compared to the baseline tracking and first interval: which reported 77% and 78% respectively. The 71% rate is also a 9% decline when compared with 2005-06 second interval tracking which reported with a rate of 80%.

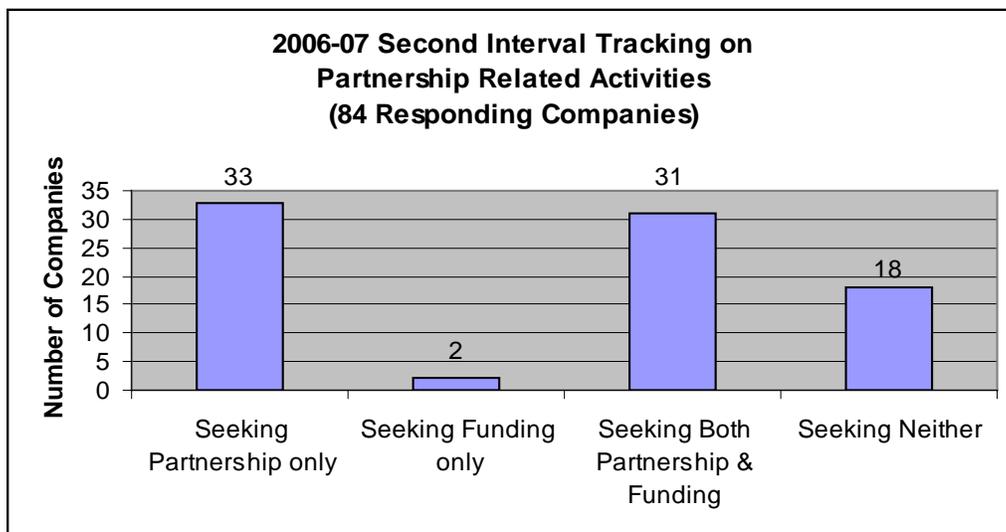
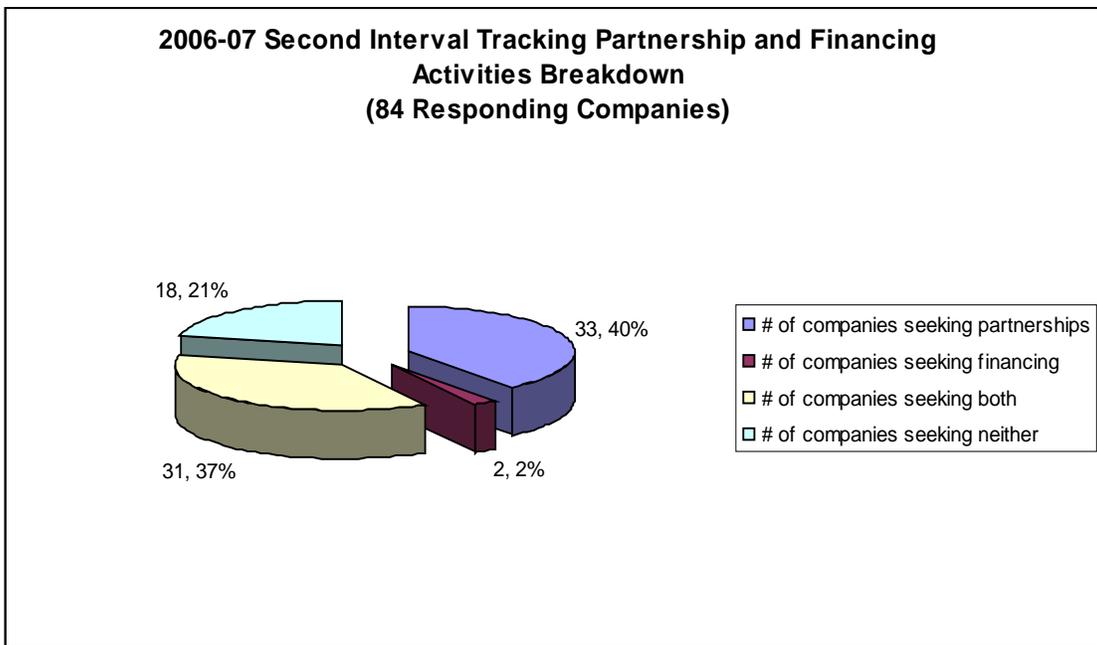


Note that “progress” is defined as at least one event in at least one of the partnership and deal-related activities listed below:

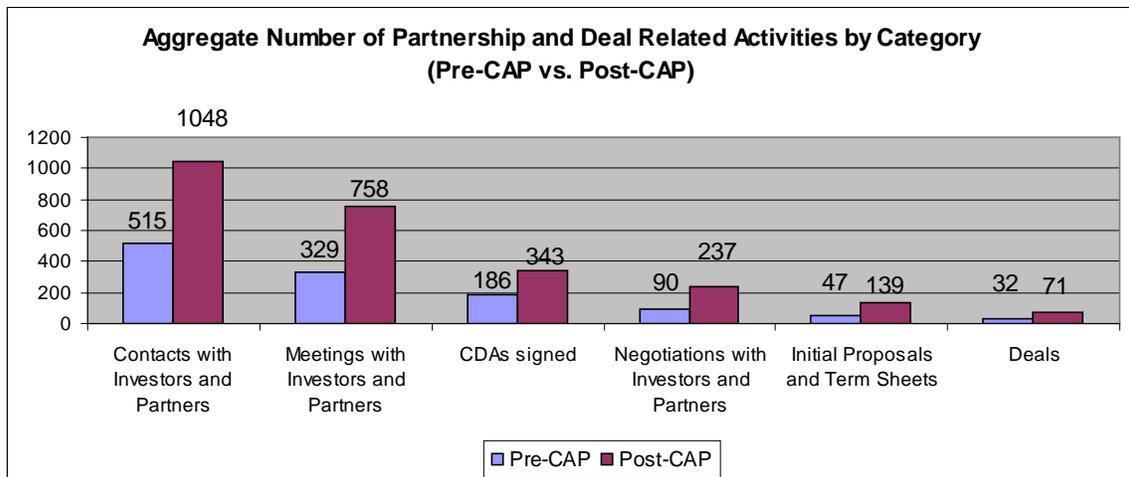
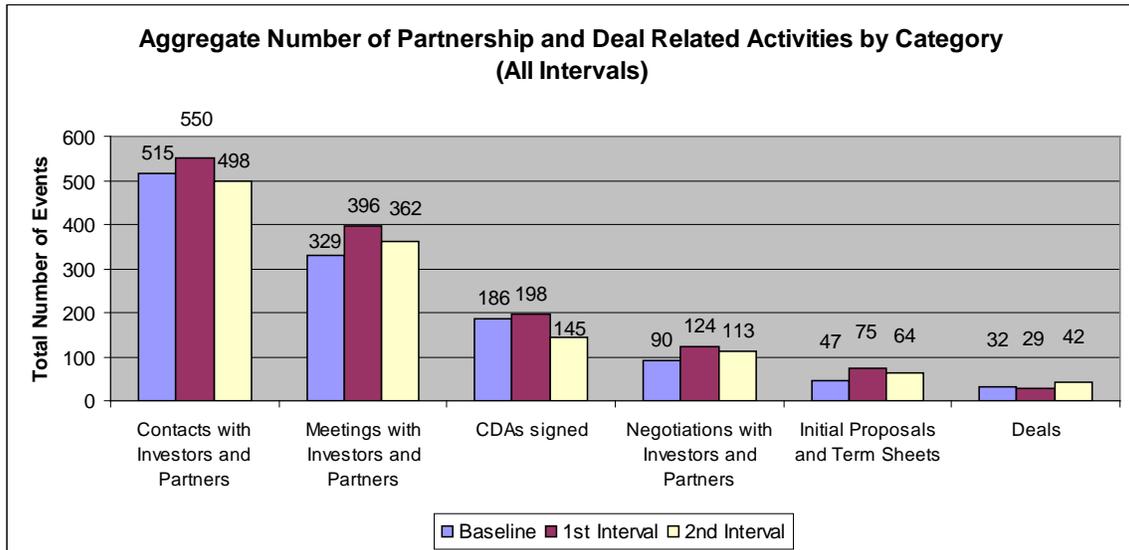
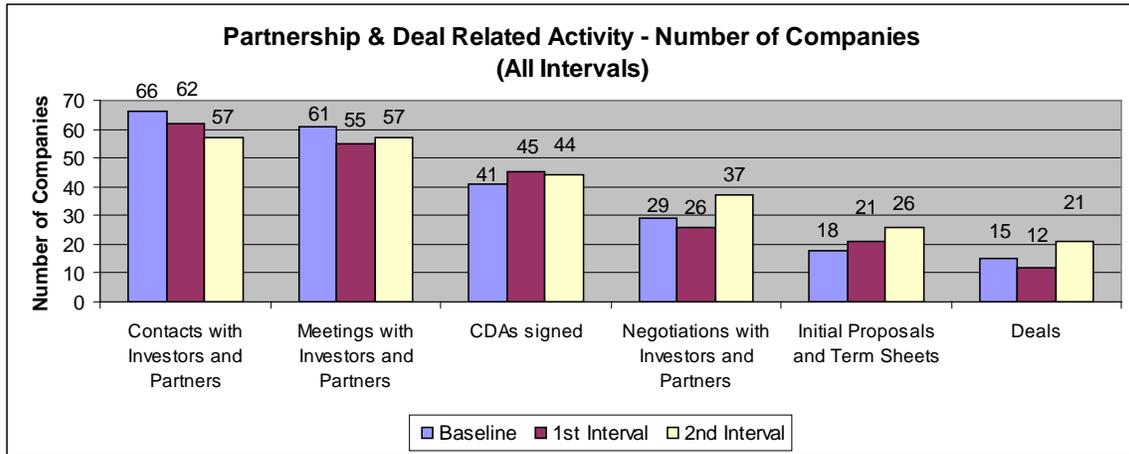
1. Contacts with Investors and Partners
2. Meetings with Investors and Partners
3. CDAs signed

4. Negotiations with Investors and Partners
5. Initial Proposals and Term Sheets
6. Deals

The charts below demonstrate a breakdown of company objectives with respect to partnership and financing. The data clearly indicate that companies are pursuing partnerships in preference to financing, and a majority of companies favor strategic alliances and collaborations; only 2 companies pursued an exclusive financing route. This is consistent with the state of the market and the industry trend of early stage life science startups steering towards potential partnerships, especially with large pharma and biotech companies. This also suggests a continuation of the trends observed in previous tracking reports. The VC environment was already beginning to suffer (a trend that was widely reported) from diminished deals, and was already starting to focus on shoring up their current portfolio companies; investment in new ventures has declined considerably. (As is mentioned later in the report, equity funding shows an increase during this period mainly due to a specific "outlier"). As has been observed in previous reports, several of the CAP companies are not "venture capital ready" and see alliances as more appropriate exit options with greater potential for success.



The charts below indicate the number of companies engaged in multiple partnership and deal related activities and the aggregate number of partnership related activities by category. Data on all three intervals have been provided to enable a comparison as well as a comparison of the intervals Post-CAP (first and second) versus the baseline or Pre-CAP period.



Key observations:

1. The *aggregate* number of activities reported in the categories of Contacts with Investors and Partners, Meetings with Investors and Partners, and CDAs Signed, are lower in the 2<sup>nd</sup> interval than the ones reported in the baseline and 1<sup>st</sup> interval period:
  - a. 57 companies reported 498 Contacts with Investors and Partners in the second interval compared to 62 companies and 550 contacts in the 1<sup>st</sup> interval periods, a 9% decrease in number of companies, and 10% decrease in number of activities.
  - b. In the baseline period, 66 companies reported 515 Contacts with Investors and Partners. This represents a 16% decrease in the number of companies, and a 3% decrease in terms of the number of deal activities.
  
2. The number of companies reporting in the categories of Negotiations with Investors and Partners, Initial Proposals and Term Sheets, and Deals are higher in the 2<sup>nd</sup> interval than the ones reported in the baseline and 1<sup>st</sup> interval period:
  - a. 21 companies reported 42 deals in the second interval compared to 12 companies and 29 deals in the 1<sup>st</sup> interval, a 75% increase in number of companies, and 45% increase in number of deal activities.
  - b. In the baseline period, 15 companies reported 32 deals. This represents a 40% increase in number of companies, and 31% increase in number of deal activities.
  
3. Overall the intensity of partnership and deal related activities was greater in the intervals post-CAP versus the baseline period (pre-CAP) for all categories.
  - a. 71 deals were closed post-CAP and 32 deals were closed pre-CAP. Note that for the year 2005-06 companies, 59 deals were closed post-CAP and 15 deals were closed pre-CAP. The year 2004-05 companies, 65 deals were closed post-CAP versus 15 pre-CAP.
  
4. NOTE: For the second interval, several companies provided a range in number of activities related to partnership and deals question. We recorded an average of the range provided. In addition, where companies provided “multiple” activities in the categories, we conservatively recorded “2” for the number of activities, which is the smallest number possible for “multiple.” Details are provided in the processed data.
  
5. The table below provides the list of companies that engaged in deals.

Company Name	Number of Deals
██████████	1
██████████	1
██████████	1
██████████	1
██████████	1
██████████	1
██████████	1

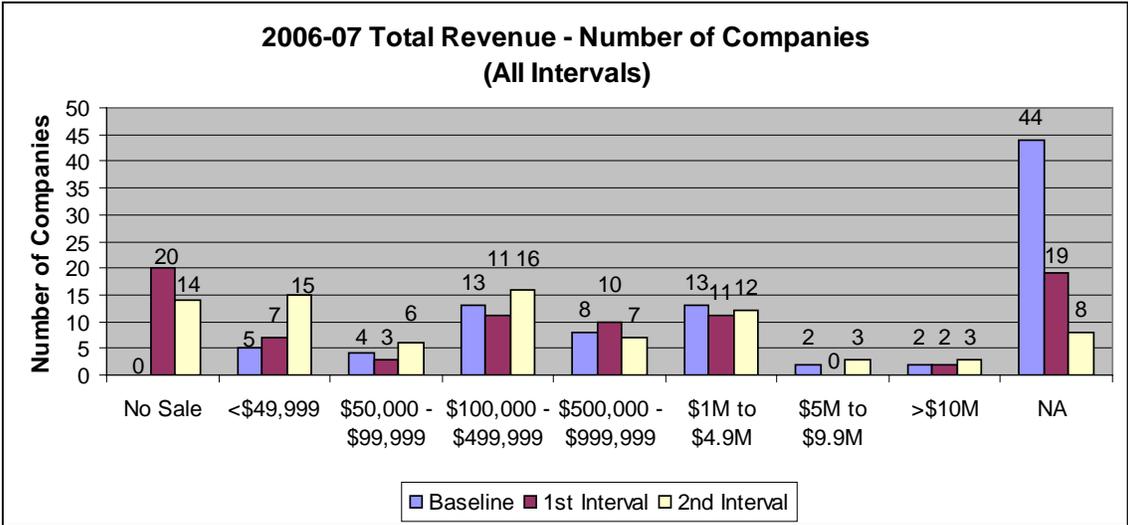
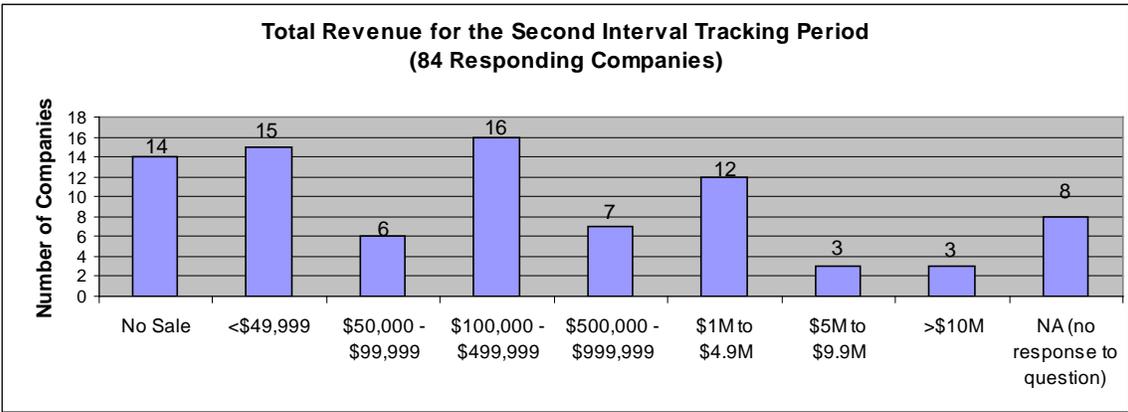
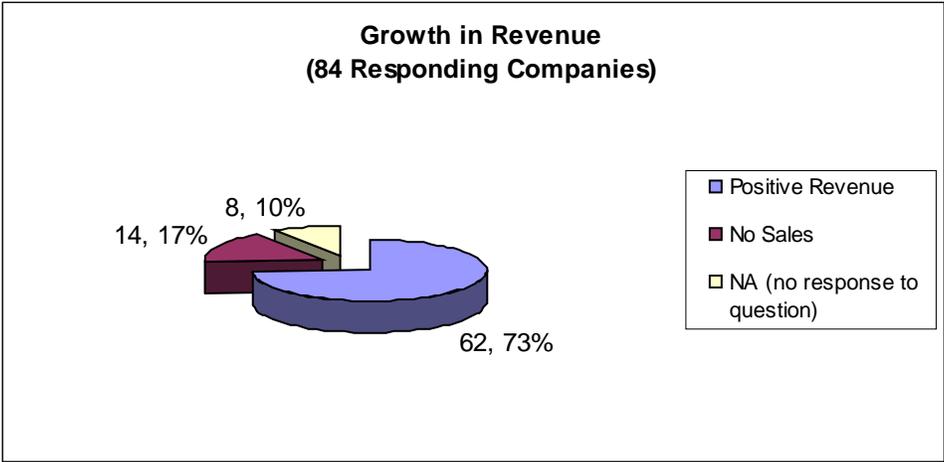
Company Name	Number of Deals
██████████	1
██████████	1
██████████	1
██████████	1
██████████	1
██████████	1
██████████	1
██████████	2
██████████	2
██████████	2
██████████	2
██████████	2
██████████	2
██████████	5
██████████	5
██████████	9
Total	42

- Most companies signed one to two deals on average. However, ██████████ reported 9 deals, with \$900K private investment from ██████████ and \$2.5M investment from the ██████████. ██████████ also received support from ██████████ which provided technical assistance in the form of engineering and test support of pre-production and final production units, as well as defining latest componentry for follow-on versions over a three-year period.
- Overall, although the number of activities reported in the categories of Contacts with Investors and Partners, Meetings with Investors and Partners, and CDAs Signed are lower in the second interval tracking, compared to the baseline period and the 1<sup>st</sup> interval period, the 2<sup>nd</sup> interval shows a greater number of deals “closed.”

### **Commercial Revenue**

The growth in revenue refers to the change in total company revenue rather than the revenue based on the CAP technology. This approach was adopted in anticipation of the reluctance of companies to provide detailed revenue data and also the challenges entailed in isolating revenue for the CAP related technology from total company revenue.

**NOTE:** Changing our analyses from the previous years, we requested that companies state their revenues within particular ranges rather than reporting specific increases in revenue growth.



**Key observations:**

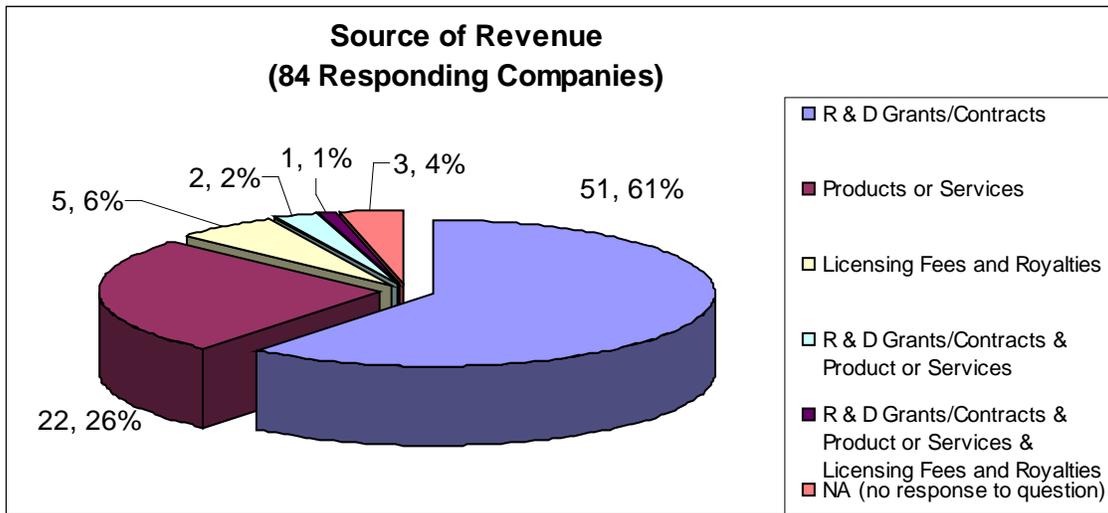
- 62 companies (73% of the responding companies) have shown revenue growth. Baseline period reported 47 companies or 52% of the responding companies reported positive revenue, and in the 1<sup>st</sup> interval, 64 companies or 77% of the companies reported positive revenue.

2. Two particular ranges in total revenue stood out in the 2<sup>nd</sup> interval period tracking:
  - a. 6 companies reported revenue between \$50,000 and \$99,999. This is the highest number reported when compared to the baseline period and 1<sup>st</sup> interval period, with 4 and 3 companies, which is an increase of 50% and 100% respectively.
    - i. 05/06 Second Interval tracking reported 0 zero number of company, and 04/05 Second Interval tracking reported 4 companies reported in the same range of revenue.
  - b. 16 companies reported revenue between \$100,000 and \$499,999. This is the highest number reported when compared to the baseline period and 1<sup>st</sup> interval period, with 13 and 11 companies, which is an increase of 23% and 45% respectively.
3. Following are the breakdown of the top three ranges of the total revenue reported:
  - a. 12 companies reported revenue between \$1M-\$4.9M. These numbers are comparable when compared to the baseline and 1<sup>st</sup> interval periods. (13 and 11 respectively.)
  - b. 3 companies reported revenue between \$5M-\$9.9M. This is a higher number compared to the baseline and 1<sup>st</sup> interval periods. (2 and 0 respectively.)
  - c. 3 companies reported in the highest revenue range of \$10 million and above were [REDACTED], with revenue of \$10-40 million, \$35-39 million, and \$40 million respectively. Below, we provide a list of companies that reported a total revenue of over \$1 million:

Revenue Range \$1M - \$4.9M	Revenue Range \$5M - \$9.9M	Revenue Range \$10M+
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]		

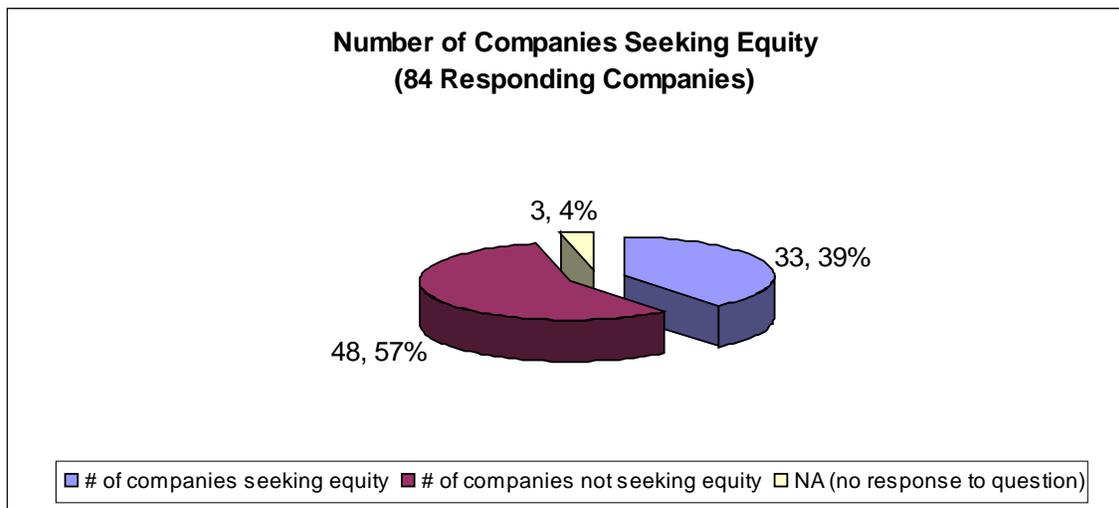
R&D Grants/Contracts remain the largest source of total revenue for 69% of companies, as shown below. This represents an increase from the 2006-07 baseline tracking period when R&D

Grants/Contracts accounted for 61% of the total sources of revenue. This number is the same compared to the 1<sup>st</sup> interval. The revenue from products or services also remained the same at 22% when compared to the 1<sup>st</sup> interval period. Licensing and royalties continue to account for a relatively small portion of revenue as has been observed in past tracking intervals as well.

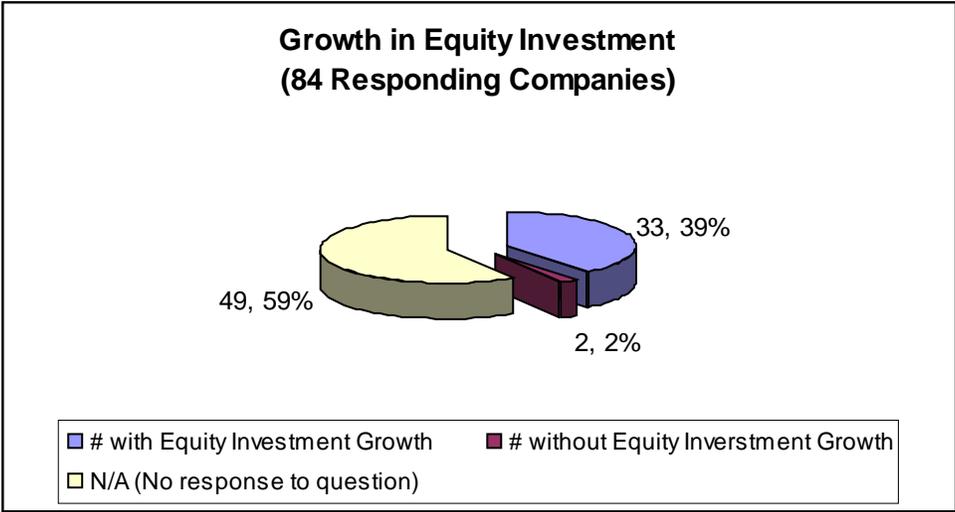


**Equity Funding**

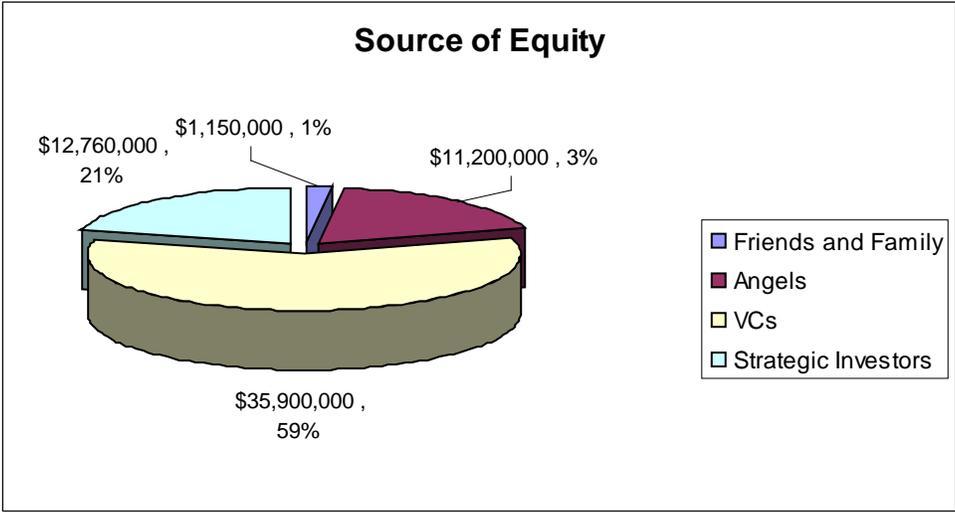
The chart below shows 33 companies or 39% of the responding companies stated that they were seeking equity funding, a decrease compared to the baseline period when 38 companies or 42% of responding companies stated that they were seeking equity funding, and an increase when compared to the 1<sup>st</sup> interval period ( 25 companies or 30% were seeking equity funding).



The data below refers to the growth in equity funding for the company as a whole. 33 companies or 39% indicated an increase in equity funding. This is an increase from the baseline period of 19 companies or 21% versus 1<sup>st</sup> interval period of 13 companies or 16%.



The total amount of new funding by source of funding is shown below.



Key observations:

1. VCs accounted for the largest source of equity funding at 55%. This data is much higher when compared to the baseline period and 1<sup>st</sup> interval tracking with 43% and 37% respectively.
  - a. 5 companies raised a total of \$35.9M from venture capitalists.
  - b. Of notable mention is the fact that a great majority of VC funding was basically obtained by one company, [REDACTED], which accounted for \$25 million of the total VC funding (69.6% of the total VC funding). [REDACTED] accounted for \$6 million of the total VC funding (16.7% of the total funding).

**NOTE:** [REDACTED], an outlier in this report greatly influenced total money raised when reported \$10-40M from VCs in the 2006-07 second tracking period. The median of \$25 million was used for the purpose of reporting.

2. See funding from VCs by company below:

Company	\$ Raised by VCs
██████████	\$ 25,000,000
██████████	\$ 6,000,000
██████████	\$ 2,500,000
██████████	\$ 2,000,000
██████████	\$ 400,000
Total:	\$ 35,900,000

3. Strategic investors accounted for the second largest source of equity funding.
  - a. 5 companies raised \$12.76M from strategic investors, or 20% of total equity raised in the second interval tracking.
4. ██████████, both outliers in this report influenced total money raised. They each reported raising \$5 million from strategic Investors in the 06-07 second tracking period. The total raised by these two companies accounted for 39% of total strategic investor funding.
  - a. However, ██████████ reported \$5 million as “pending” in the tracking data.
5. See funding from strategic investors by company below:

Company	\$ Raised by Strategic Investors
██████████	\$ 5,000,000
██████████	\$5,000,000 (pending)
██████████	\$ 2,500,000
██████████	\$ 250,000
██████████	\$ 10,000
Total	\$ 12,760,000

6. Angel funding accounted for 17% of total equity raised. When compared with the other tracking periods, the amount raised is the lowest in 2006-07 (6 companies raised a total of \$11.2 million in angel funding). In the baseline period, 8 companies raised \$16.12 million, and 5 companies raised \$17million in the 1<sup>st</sup> interval tracking.
7. See funding from angel investors by company below:

Company	\$ Raised by Angel Funding
---------	----------------------------

Company	\$ Raised by Angel Funding
██████████	\$ 2,100,000
██████████	\$ 350,000
██████████	\$ 3,000,000
██████████	\$ 1,500,000
██████████	\$ 4,100,000
██████████	\$ 150,000
Total:	\$ 11,200,000

8. Bank Loans and Other/Alternative Financing together accounted for 6% of the total funding effort, with ██████████ obtaining \$1 million in alternative financing. See funding from bank loans and other/alternative financing below:

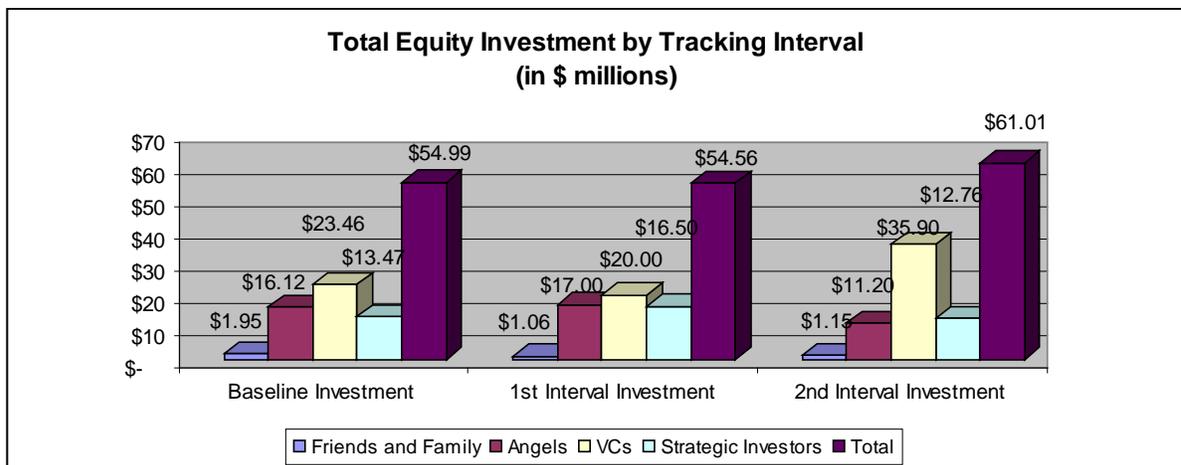
Company	Bank Loan - \$ Amount of Financing	Alternative Financing
██████████	\$ 50,000	
██████████		\$ 30,000
██████████	\$ 206,000	\$ 113,000
██████████		\$ 170,000
██████████	\$ 100,000	
██████████	\$ 150,000	
██████████	\$ 100,000	
██████████	\$ 500,000	
██████████	\$ 200,000	
██████████	\$ 400,000	\$ 400,000
██████████	\$ 300,000	
██████████	\$ 300,000	
██████████	\$ 1,000,000	

Company	Bank Loan - \$ Amount of Financing	Alternative Financing
Total:	\$ 3,306,000	\$ 713,000

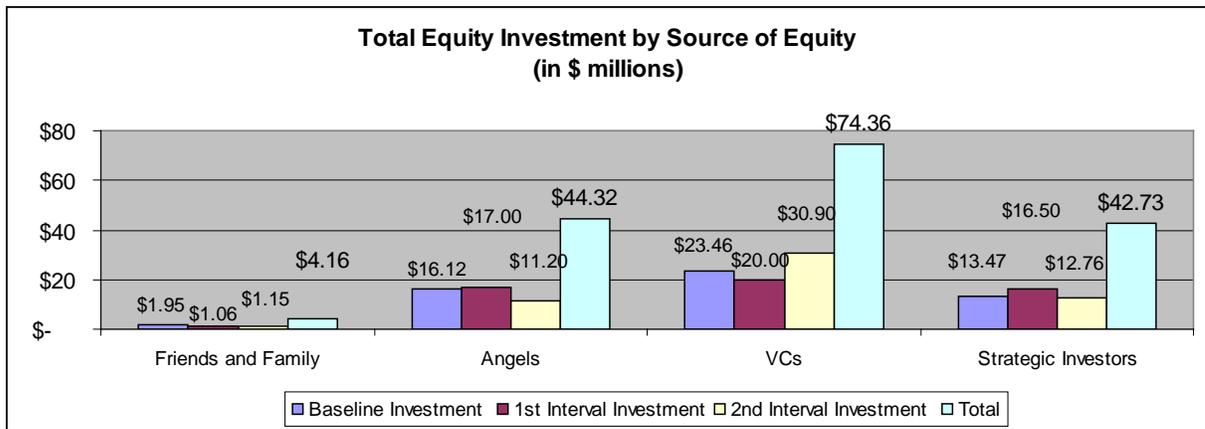
9. In total, \$61.01 million was raised by the 21 CAP companies that were successful with equity investment in 2006-07 second interval tracking. This is an increase of 11% and 10% comparison to 2006-07 baseline and 1<sup>st</sup> interval respectively. (19 companies raised a total of \$54.99 million in the baseline period, and 13 companies raised \$54.56 million in the 1<sup>st</sup> interval tracking period).

Tracking Period	Interval	Funding
2004-2005	Second Interval	\$7,700,000
2005-2006	Second Interval	\$41,049,000
2006-2007	Second Interval	\$61,010,000

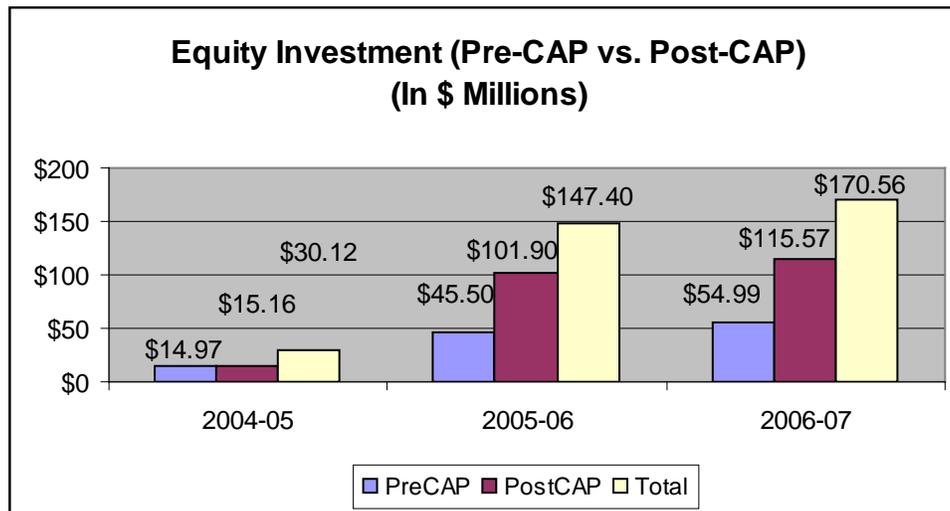
10. Venture capital dominated the sources of equity for the 2006-07 companies, followed by angel capital, strategic investments, and finally capital from friends and family. This data scenario is quite different from that observed for the 2004-05 and 2005-06 CAP companies (although, as noted before, the outlier companies are significant in this category).
- Angel funding accounted for the largest source of funding for the 2004-05 companies for their entire tracking period, followed by VC funding, strategic investment, and friends and family.
  - Strategic investment accounted for the largest source of funding for the 2005-06 companies for their entire tracking period, followed by VC funding, angel capital, and friends and family.



11. Note that venture capital raised steadily increased to \$30.9 million in the second interval, from baseline line period of \$23.46 million and 1<sup>st</sup> interval period of \$20 million. However, there was a decline in angel capital and strategic investment. Angel funding stood at \$11.20 million and strategic investment at \$12.76 million, a decrease of 34% and 23% from the 1<sup>st</sup> interval respectively. Capital raised from friends and family remained steady through the intervals.



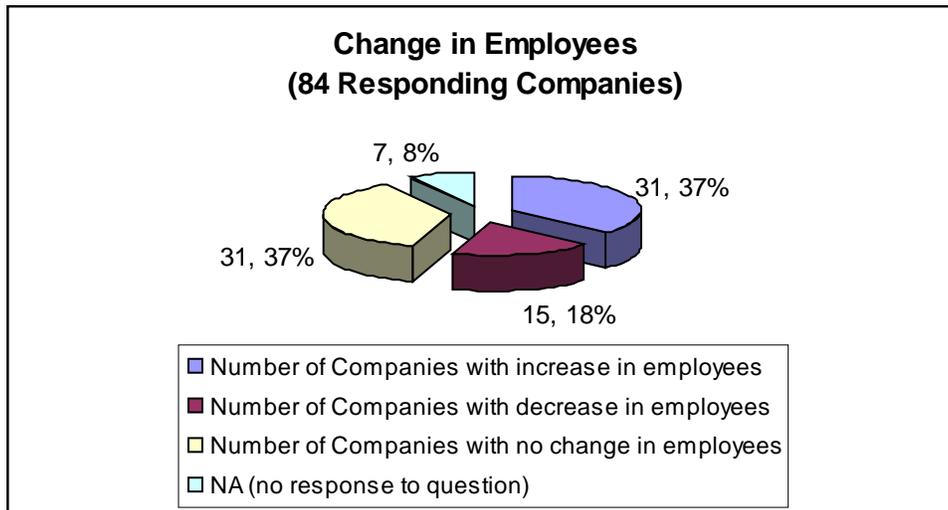
12. Overall, the 2006-07 CAP companies raised \$170.5 million in equity investments, a significantly higher amount than the \$147.4 million raised in 2005-06, and \$30.12 million raised in 2004-05. Also, the post-CAP amount (\$115.57 million) raised by the 2006-07 companies is far greater than the pre-CAP amount (\$54.99 million). Again, we must point to the caveat of the two outliers mentioned above.



## Other Success Indicators

### Employment growth

- 31 companies or 37% of the respondents indicated an increase in the number of employees. This is the lowest of the three intervals: in the baseline tracking, 38 companies or 50% and in the 1<sup>st</sup> interval tracking 42 companies or 60% reported increases.
- 15 companies or 18% of the respondents indicated a decrease in the number of employees while 31 companies or 37% reported no change in the number of their employees.



### **Mergers & Acquisitions**

No mergers or acquisitions were reported in the 2<sup>nd</sup> interval period. However, 6 companies are currently in discussion on such events: [REDACTED].

## **CAP Impact**

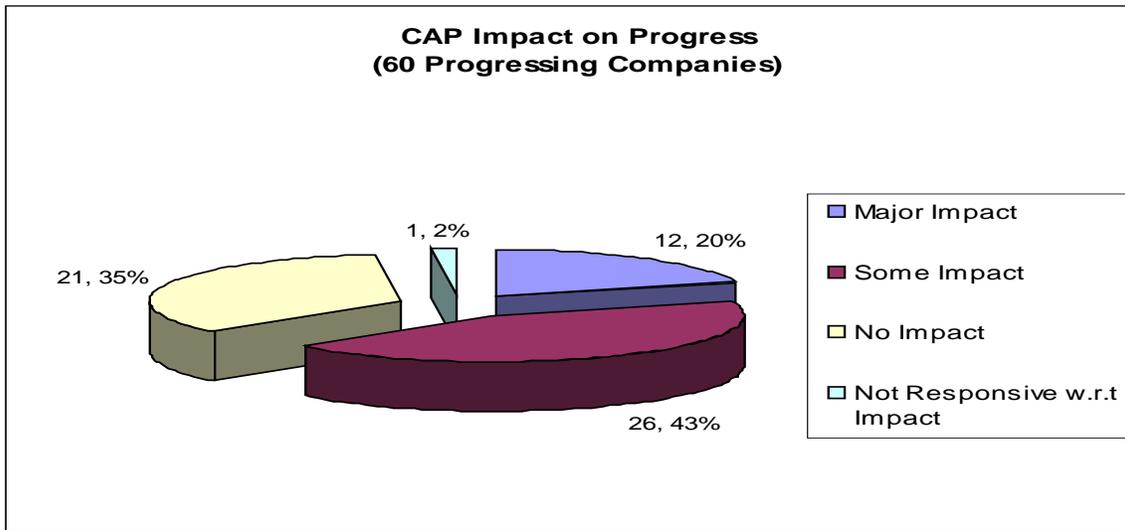
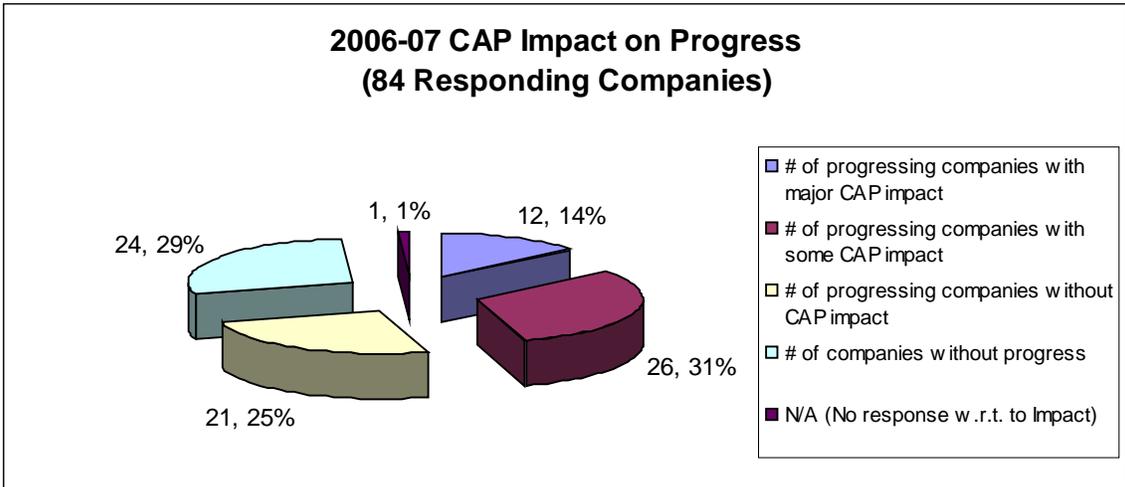
CAP Impact was rated by the companies as either 1) Major, 2) Valuable, 3) Little or No Impact. CAP impact was determined for the following activities that have been addressed earlier in the report.

- Activity in Partnerships
- Revenue
- Equity Investment
- Bank Loans and Other/Alternative Financing

Note that the data here represent companies' subjective assessments on the impact of CAP on specific commercialization outcomes. Companies have separately outlined their feedback on the CAP as a program, the results of which have been submitted to NIH.

### **Activity in Partnerships**

Progress is defined as at least one activity in at least one of the partnership related activity categories.



**Key observations:**

1. 12 companies have credited the CAP with having “major impact” and 26 companies as having “valuable” impact.
2. 63% of the progressing companies (companies with as at least one activity in at least one of the partnership related activity categories in page 5), have attributed major or some impact to the CAP on partnership and deal related activities. It is the lowest percentage recorded companies compared to baseline (86%) and 1<sup>st</sup> interval tracking (72%).

Comments from CAP participants regarding CAP impact on partnerships are shown below. Note that these are comments from companies that attributed the CAP with major or valuable impact.

“The CAP positioned [redacted] with a resume of concrete research and development accomplishments related to gauging the effectiveness of its technology to combat Spatial Disorientation/Vertigo and Motion Sickness, as well as maturing the proof-of-concept units that facilitated recruiting each of the partner organizations listed herein. The CAP has positive had a “Major Impact” on [redacted] activities.”

“In our past reports, we mentioned that our original product development goals had significant overlap with the [redacted]. Our conclusion at the time was that we couldn’t really compete

with [REDACTED], but had to work with [REDACTED]. With the award of our second SBIR Phase II project and our continuing participation in the CAP program under the advice of [REDACTED], we have officially partnered with [REDACTED] to incorporate their [REDACTED] instruments into our system. Our collaboration with the [REDACTED] Team has resulted in several new collaboration opportunities, including being included in several new [REDACTED] - related grant proposals.”

“Both the CAP program and subsequent interactions with [REDACTED] has had a major positive impact.”

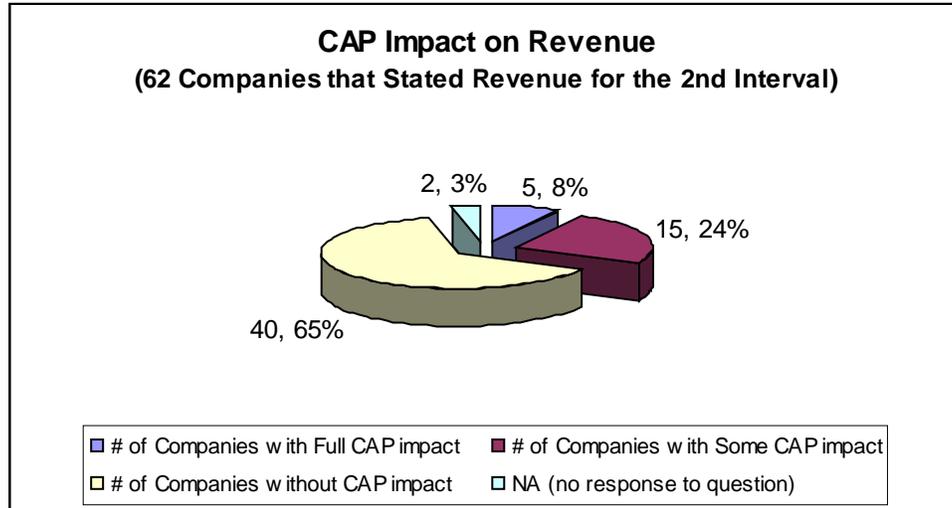
“The CAP program gave me the insights and confidence to approach other business entities to try to bring this technology to market. The failure of us to accomplish that thus far rests on the fact that it is an unproven niche technology that investors and partners are fearful of. It looks as though we will need to begin marketing ourselves to generate some revenues and to reduce the fear factors.”

“As for last report, the major benefit of CAP has been increased confidence to follow my instincts and continue to grow our business in the unorthodox way we’ve chosen. I’m more effective in discussions and deals because of this.”

“The CAP program provided us a significant resource on identifying strategic alliance partners and developing networks with a number of strategic partners.”

“The techniques and strategies studied and initiated after the CAP program contributed substantially our ability to get things out the door and knowing how to talk to distributors.”

**Revenue**



The above chart shows the impact that CAP had on the companies’ revenue that incurred in the baseline period. Note that some companies commented that it is still too early to assess CAP impact on revenue.

**Key observations:**

1. 32% of the 20 companies indicated that the NIH-CAP program had some or full valuable impact on revenue. This is a decline from the baseline period (31 companies or 65%) and 1<sup>st</sup> interval tracking (29 companies or 63%) reporting on some or valuable impact on revenue.

2. The following companies attributed the CAP with a major impact in this category: [REDACTED].
3. [REDACTED] attributed CAP with little or no impact on company revenue. However they stated "The impact upon revenues over the last nine months was limited, however the CAP program enabled us to identify a large potential market. At this time we are pursuing other business opportunities which grew out of the Phase II program."

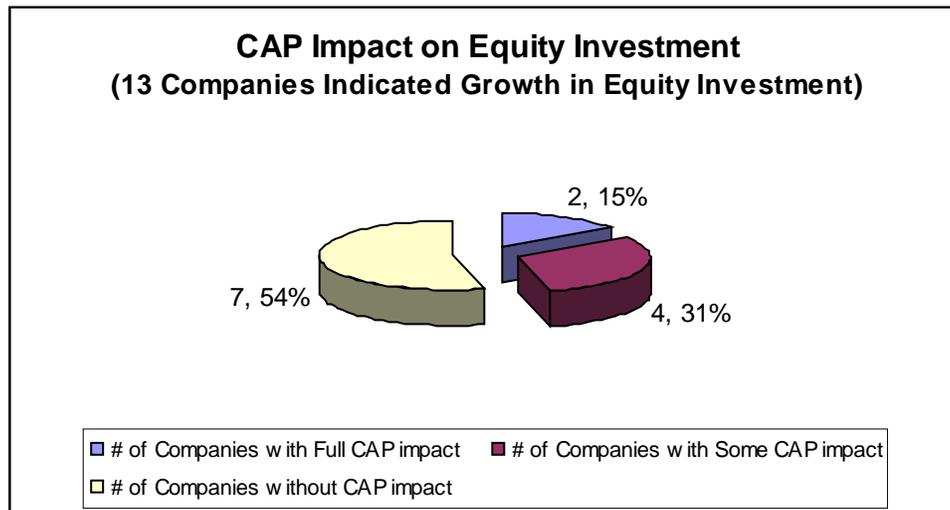
Comments from CAP participants regarding CAP impact on revenue are shown below.

"In the report period, we were in transition to remarket ourselves as a symptom management solution company in collaboration with the [REDACTED] Network. Minimum revenues have incurred and they were mostly from our [REDACTED] fees. However, we do think we are much better positioned now to grow our company with the help of the CAP program."

"We are still conducting our Phase II SBIR on a no-cost extension to complete our validation work. After that is finished we will investigate other avenues of financing. The CAP program has given me the knowledge of how to approach that task."

"...The CAP program got us thinking in the right way to move our products from R&D to the marketplace and get the initial sales going. We are still working hard to increase the volume, but we got a start and have some satisfied customers."

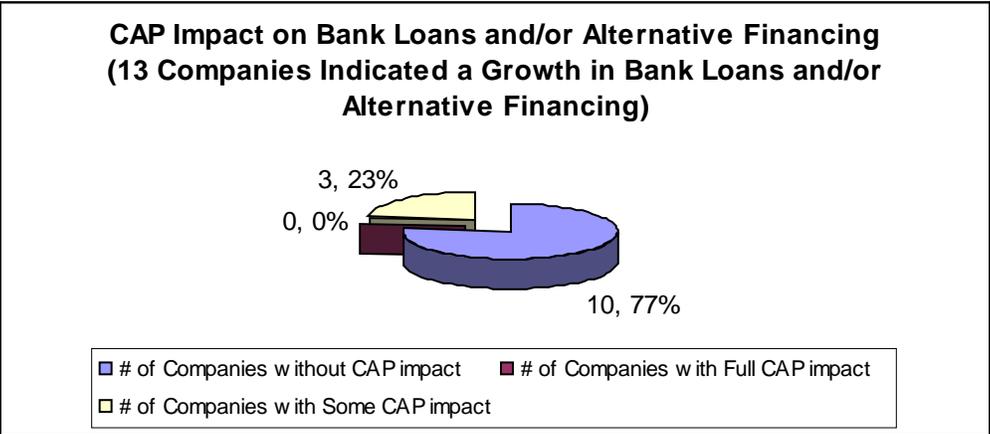
**Equity Funding, Bank Loans and Other/Alternative Financing**



The above chart shows the impact that CAP had on the companies' growth in equity investment.

Key observations:

1. 46% of the 13 companies that indicated a growth in equity investment attributed the CAP with full or some valuable impact. This is a slight increase when compared to the 1<sup>st</sup> interval tracking and baseline period:
  - a. 1<sup>st</sup> interval tracking reported 31% of the 13 companies that indicated a growth in equity investment attributed the CAP with some impact compared with 32% of the 19 companies that indicated a growth in equity investment in the baseline period.



The above chart shows the impact that CAP had on the companies' growth in bank loans or other/alternative financing.

**NOTE:** Baseline period and 1st interval tracking did not request for bank loan and/or alternative financing data. This information will be compared with other interval data when the latter is collected.

**Key Observations:**

1. 23% of the 13 companies that indicated funding via bank loans and other/alternative financing attributed the CAP with valuable impact.
2. ██████████ did not report any equity in 2<sup>nd</sup> interval tracking, nor did the company rate the CAP impact. However, they stated: "Although we have not completed any strategic partnerships, we have better tools and a better plan as a result of participating in the NIH-CAP process. We are continuing to work with our consultant provided by the CAP program."

Comments from these companies that attributed the CAP with impact include:

"██████████ included background information relative to the CAP in all of its investor briefings, documentation submitted to the State of Texas in support of winning a full ETF investment. The CAP provided ██████████ with a substantiated "credibility" foundation for helping to secure the equity investments listed herein."

"The value of the CAP program has been in providing the vision for the Phase-III bridge proposal, which was prepared in parallel to the Venture Capital negotiations. The vision of Figure 4 above is key to the success of the Molecular Breast Imaging product – the valuable impact of the CAP program is in instilling this understanding of the combination of strategic, financial, and technical aspects which make up three vital legs of a stool, and the stool will fall or teeter if any of these legs is weak. For example, we know of technologies that work that have been infused with seemingly limitless capital, but nevertheless the market does not grow due to regulatory, clinical, or competitive reasons. In these cases, the strategic leg does not have the strength to support the technology, no matter how large the funding or impressive the technology. So the NCI Bridge proposal has allowed us a forum in which to articulate this Commercialization Plan."

"What we learned from Larta and NIH CAP was key to our recruitment."

## Summary

The 69% response rate in the second and final interval of the 2006-07 NIH-CAP is encouraging and provided some useful data on CAP company commercialization progress.

60 or 49% of the companies indicated commercialization progress in the partnership and deals category. Overall, the 2006-07 results indicate (compared to previous years), a higher rate of partnership and deal outcomes as well as equity funding (see summary table below). The number of companies that received VC, angel, and strategic investments was significantly higher in the 2006-07 2<sup>nd</sup> interval tracking period than the 2004-05 and 2005-06 2<sup>nd</sup> interval tracking periods. VC funding was the largest source of funding in 2006-07, as opposed to angel funding for the companies in the 2004-05 and the strategic investment for 2005-06 companies. Again, the caveat here is the presence of the outliers mentioned earlier in the report.

R&D grants/contracts remain the largest source of the total revenue for the 2006-07 CAP companies. This trend was observed for all three intervals, as well as for the three intervals in 2005-06. This data has been consistent as the early NIH-CAP companies have consistently shown continued dependency on government funding, even when other sources of revenue are present or credible, due to the early stage nature of the companies, their research orientation and, as we have observed in the program itself, the need to keep certain project lines open.

The 2006-07 CAP companies raised an aggregate of \$170.6 million in equity investments. It is a significantly higher amount than the \$30.1 million raised by the 2004-05 companies and \$147.4 million raised by the 2005-06 companies. Equity investment for Post-CAP is greater than the amount raised in the pre-CAP period.

Finally, with regards to CAP impact, impact on revenue has declined. On the other hand, impact on equity has slightly improved.

The CAP is a training program that provides business training and strategy development to the participating companies. It is important to note that the tracking effort and this report do not capture the impact of the program on the companies' strategic planning efforts, management and business expertise and tools. Furthermore, given the relatively long life cycle of early stage life science companies, growth and success are likely to continue post-tracking periods. Companies should continue to explore alternative sources of funding to the traditional VC route, given their expertise and stage, including angel capital, strategic investments and other new sources and avenues of funding available.

Key results are summarized below:

	2004-05	2005-06	2006-07
<b>Deals</b>	82	74	105
<b>New Equity Investment</b>	\$30.1Million	\$147.4Million	\$170.6Million
<b>CAP Impact</b>	56%	85%	74%

# APPENDIX A

2006-07 CAP companies relieved from tracking:

Company Name	Notes
██████████	██████████ is not presently trying to commercialize the technology that was studied under the CAP since additional research effort is needed to produce a commercializable product (this was discovered during completion of the Phase II project technical effort). No further progress with respect to this technology will be reportable.
██████████	██████████ will not provide any additional tracking information. As a result, NIH relieved the company from further tracking.
██████████	Partially completed CAP and shifted focus to a different technology.

# APPENDIX B

**NIH-CAP 2006/2007**  
**COMMERCIALIZATION PROGRESS TRACKING FORM- Second Interval**  
**April 1, 2008 – December 31, 2008**

**PLEASE RETURN BY February 9, 2009 TO [KETZLER@LARTA.ORG](mailto:KETZLER@LARTA.ORG)**

**Company Name:**  
**CAP SBIR Grant #:**  
**Name of Individual Completing Form:**  
**Position:**  
**E-Mail:**  
**Telephone:**

Please fill in the **COMPANY COMMERCIALIZATION PROGRESS TRACKING** form below.

NIH is very interested in your commercialization progress and in your feedback as to whether the CAP program was helpful. You have already been asked for your inputs about your commercialization progress from September 1, 2006 until June 30, 2007 to serve as a base. We are now asking for information for the period **April 1, 2008 to December 31, 2008**. Again, we believe that such tracking can be beneficial to you as a management tool to periodically assess your company's progress and growth. Please answer the questions as comprehensively as possible. **All information provided will be held in the strictest of confidence and will only be available to NIH.** *All quantitative data will be used for aggregate statistical purposes only.*

The tracking form is divided into four sections: (1) partnerships activities, (2) equity investment, (3) revenue, (4) and other success indicators (employees, acquisitions). It not only provides you the opportunity to report your measurable achievements, but it also allows for your opinions regarding the impact CAP may have had on your progress.

### IMPORTANT: NOTE ON CAP IMPACT

When assessing the CAP impact on partnership activities, funding, and revenue, please consider both the direct and indirect impacts of the program. For example, a direct impact would include introducing you to a potential partner and an indirect impact would include the tools and training delivered by CAP that may have significantly contributed, or in your opinion, would significantly contribute to, the development of a partnership. Thus, "**Major Impact**" would indicate that CAP significantly influenced the company's growth whether it be a result that is tangible (a "deal") or intangible (being better prepared and oriented toward a potential outcome). "**Valuable Impact**" would indicate that CAP contributed to your growth (tangible or intangible) but the impact was less than "Major." We understand that these differences are subjective in nature. However, in either case, what we are after is your assessment as to whether you are "better off" after CAP than you were before you entered the program. "Little or No Impact" is self-explanatory.

#### 1. PARTNERSHIP ACTIVITIES

- a) Are you seeking partnerships? Yes \_\_\_\_\_ No \_\_\_\_\_
- b) What kind of partnerships are you considering? (Check one or more, as appropriate): Strategic Partner \_\_ Technical collaboration \_\_ Distribution \_\_ Other (Please specify)
- \_\_\_\_\_

- c) **Please respond to this question only if you are seeking partnerships.** With regards to your CAP-related technology, please indicate your company's progress in terms of partnership activities. State the number of partnership-related activities in which your company has engaged between April 1, 2008 and December 31, 2008. Please only state numbers and not qualitative data.

Activity	Number of Partnership-related activities in which your company has been engaged between April 1, 2008 and December 31, 2008	Describe Significant Outcomes
<b>Contacts with Partners</b> Count only contacts with whom you had a meaningful conversation with about your mutual interests		
<b>Meetings with Partners</b> Meetings can be face-to-face or by phone/web but should involve exploration of potential deals in some detail.		
<b>Confidential Disclosure Agreements signed</b> CDA (NDA) agreements are generally a pre-requisite for any serious discussion with potential partners.		
<b>Negotiations with Partners</b> At this stage, all parties are interested in the deal and you are exploring various give and take scenarios.		
<b>Initial Proposals and Term Sheets</b> These are proposals of key terms of the deal and serve as the basis for a final agreement.		
<b>Deals</b> Signed legal documents committing partners to a process, timeframe and outcome. If appropriate to the "deal(s)", please indicate the dollar amount(s) involved.		

- d) **Please respond to this question only if you are seeking partnerships:**

Please indicate the impact of the CAP on your partnership-related activities for the period April 1, 2008 to December 31, 2008 (Note: Please refer to the CAP Impact guideline on the first page.)

\_\_\_ Major Impact    \_\_\_ Valuable Impact    \_\_\_ Little or No Impact

Comments:

## 2. FUNDING: EQUITY INVESTMENT, BANK LOANS OR OTHER/ALTERNATIVE FINANCING

a) Are you seeking outside financing? Yes \_\_\_\_ No \_\_\_\_\_

b) Please check each of the following as appropriate to your situation:

Equity investment \_\_\_\_

Bank loan or line of credit \_\_\_\_

Other/Alternative Financing (e.g. receivable financing; please specify): \_\_\_\_\_

c) **Please respond to the following only if you checked “Equity Investment” above:**

Please state the total amount of equity investment received by the **whole** company INCLUDING your CAP-related technology in the time period April 1, 2008 to December 31, 2008. Please only state numbers and not qualitative data.

Investor Party	Amount of Equity Investment
<b>Friends and Family</b>	
<b>Angels</b> High net worth individuals; always invest as individuals although may belong to angel organizations.	
<b>Venture Capitalists (VCs)</b> Institutional investors	
<b>Strategic Investors</b> Investors that are looking to achieve other goals in addition to financial returns; typically, this may include corporations seeking to fill or expand their product lines or corporate “venture arms.”	

d) **Please respond to this question only if you checked “Equity Investment” above:**

Please indicate the impact of the CAP on equity investment received for the period April 1, 2008 to December 31, 2008. (Note: Please refer to the CAP Impact guideline on the first page.)

\_\_\_\_ Major Impact    \_\_\_\_ Valuable Impact    \_\_\_\_ Little or No Impact

Comments:

e) **Please respond to this question only if you checked “Bank Loan or line of credit” or “Other/Alternative Financing” in 2 b) above.**

Bank Loan/Other	Amount of Financing
<b>Bank Loan</b> Financial Institution, include banks and credit unions.	

Bank Loan/Other	Amount of Financing
<b>Other/Alternative Financing</b> (e.g. receivable financing); please specify: _____	

f) **Please respond to this question only if you responded to e) above.**

Please indicate the impact of the CAP on “Bank Loan” or “Other/Alternative Financing”. (Note: Please refer to the CAP Impact guideline on the first page.)

\_\_\_ Major Impact    \_\_\_ Valuable Impact    \_\_\_ Little or No Impact

Comments:

### 3. REVENUE

Please report the results **for the whole company** and not just your CAP-related technology.

a) Indicate your company’s largest source of revenue (**Choose one only**)

R&D Grant/Contracts \_\_\_\_\_ Products or Services \_\_\_\_\_ Licensing Fees and Royalties \_\_\_\_\_

b) What is the dollar range of your company’s cumulative sales of products/services for the past 9 months (April 1, 2008 to December 31, 2008)?

\_\_\_ No sales yet

\_\_\_ Less than \$50,000

\_\_\_ \$50,000 - \$99,999

\_\_\_ \$100,000 - \$499,999

\_\_\_ \$500,000 - \$999,999

\_\_\_ \$1,000,000 - \$4,999,999

\_\_\_ \$5,000,000 - \$9,999,999

\_\_\_ \$10,000,000 and above, please specify \$ \_\_\_\_\_

c) **Please indicate the impact of the CAP on your company’s revenue for the period April 1, 2008 to December 31, 2008. (Note: Please refer to the CAP Impact guideline on the first page.)**

\_\_\_ Major Impact    \_\_\_ Valuable Impact    \_\_\_ Little or No Impact

Comments:

**4. OTHER SUCCESS INDICATORS (EMPLOYEES, ACQUISITIONS)**

- a) Have the number of employees in your company increased since April 1, 2008? If yes, please specify the number of employees in April 1, 2008, versus the current number of employees, and the titles/positions of the new employees in the table below. Count part-time employees as 1 (i.e. do not use fractional numbers to count part-time employees.)

	Employee Information
<b>Number of Employees in April 1, 2008</b>	
<b>Current Number of Employees</b>	

- b) Are you currently in discussion regarding an acquisition? Yes \_\_\_\_\_ No \_\_\_\_\_

Has your company been acquired? Yes \_\_\_\_ No \_\_\_\_

If your answer to either of the above in b) is “Yes”, NIH would like to continue tracking the progress of the SBIR-developed technology. Please provide the following information.

	Acquisition Information
<b>Name of the Acquiring Company</b>	
<b>Change in Company Name as a Result of the Acquisition</b>	
<b>Change in Company Contact Information as a Result of the Acquisition</b>	
<b>Additional Details</b>	

**THANK YOU ONCE AGAIN FOR YOUR PARTICIPATION IN THE 2006/2007 CAP AND FOR YOUR FEEDBACK. IT WAS AN HONOR TO WORK WITH YOU AND WE WISH YOU THE BEST OF SUCCESS.**