



U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health



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

NIH-CAP 2004-05

**Second Interval Tracking
Report**

for the period

July 1, 2006-March 31, 2007

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Background & Introduction

Larta tracks the progress of NIH-CAP participating companies for an 18 month period in two 9 month intervals, in addition to the baseline period, which spans the duration of the program. This report provides progress tracking results for the companies that participated in the CAP in 2004-05, for the second interval since the culmination of the CAP or July 1 2006-March 31, 2007. This set of companies was tracked for the baseline period of September 2004 to June 2005 and first interval period of July 1, 2005 to March 31, 2006 and results have been previously submitted to NIH.

The Tracking Form

The first year of the CAP for NIH SBIR Phase II grantees was launched in July 2004. 114 companies completed the program in June 2005. At the end of the program, all 114 companies were sent baseline tracking forms. For the first interval, 6 companies were relieved from tracking (see Appendix A), leaving 108 companies to be tracked. Some notable features of the tracking form (see Appendix B) are listed below:

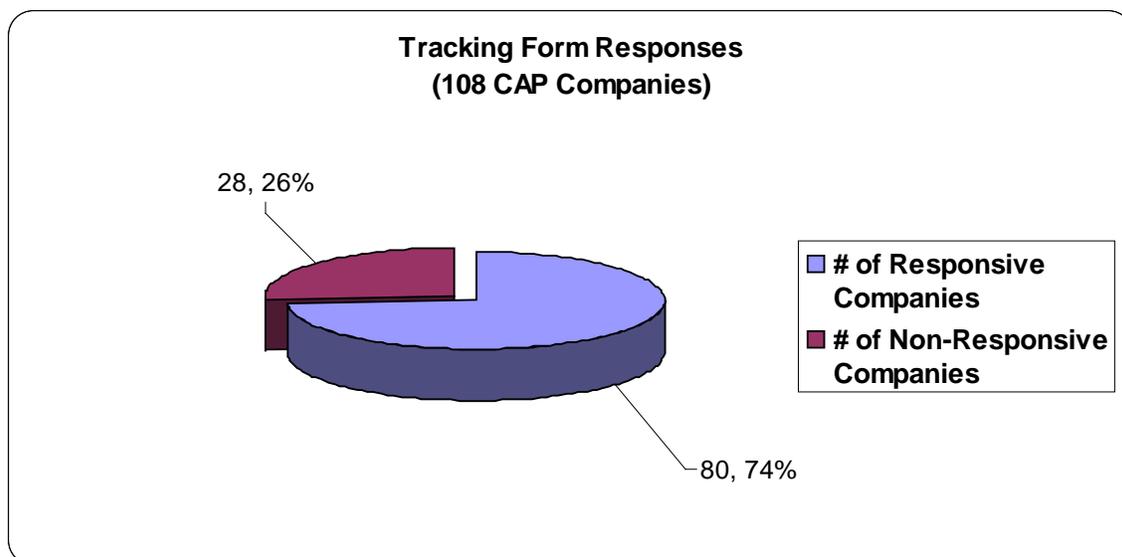
- Tracking is focused on quantifiable end results, i.e., deals, revenue growth, increased equity investment, increased employment, M&A outcomes.
- In addition, the form defined a “deal activity pipeline”. We hope that this attempt at quantifying complex and often circuitous commercialization efforts 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 in the studies of SBIR program performance in general; their use in evaluating CAP itself is limited due to the lack of a control group of SBIR companies.
- Data on the CAP impact are indicative of CAP significance. However, they are subjective estimates and cannot be relied upon for longer tracking periods. Note that for the first interval, companies were no longer expected to rate the CAP impact on a scale of 1 to 5, but to indicate if the CAP impact was 1) Major, 2) Valuable, 3) Minor or 4) None.

Response Rate

On February 2, 2007, 108 of the 114 2004-05 NIH-CAP companies were sent the tracking form from Kay Etzler at NIH. 80 of the 108 companies responded to the tracking request (after several email reminders), an encouraging 74% response rate. The response rate for the baseline period was 79%, and for the first interval period was 71% so for the second interval, a response rate between 70% and 75% was more than satisfactory given that more time had elapsed since the culmination of the CAP. Company updates based on responses include:

██████████ - the company is no longer functioning

██████████ - development of the technology applied to the 2004-05 CAP has been discontinued.



This report presents only a summary of the data. Detailed source data can be found in a separate Excel file (Processed Tracking 2004-05 Second Interval.xls). This report will first discuss the overall commercialization progress, and then separately evaluate direct CAP impact.

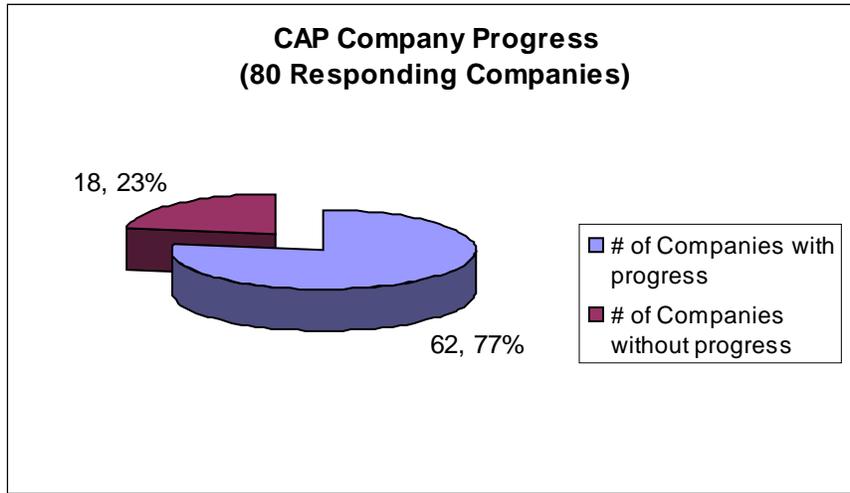
Commercialization Progress

The following charts describe the progress (with the commercialization of SBIR Phase II technologies) that the companies have made during the second interval since the culmination of the CAP. Progress is determined by a positive change in the following categories:

- Activity in Partnerships and Financing Deals
- Growth of Revenue
- Growth of Equity Investment
- Growth in Employment
- Acquisitions

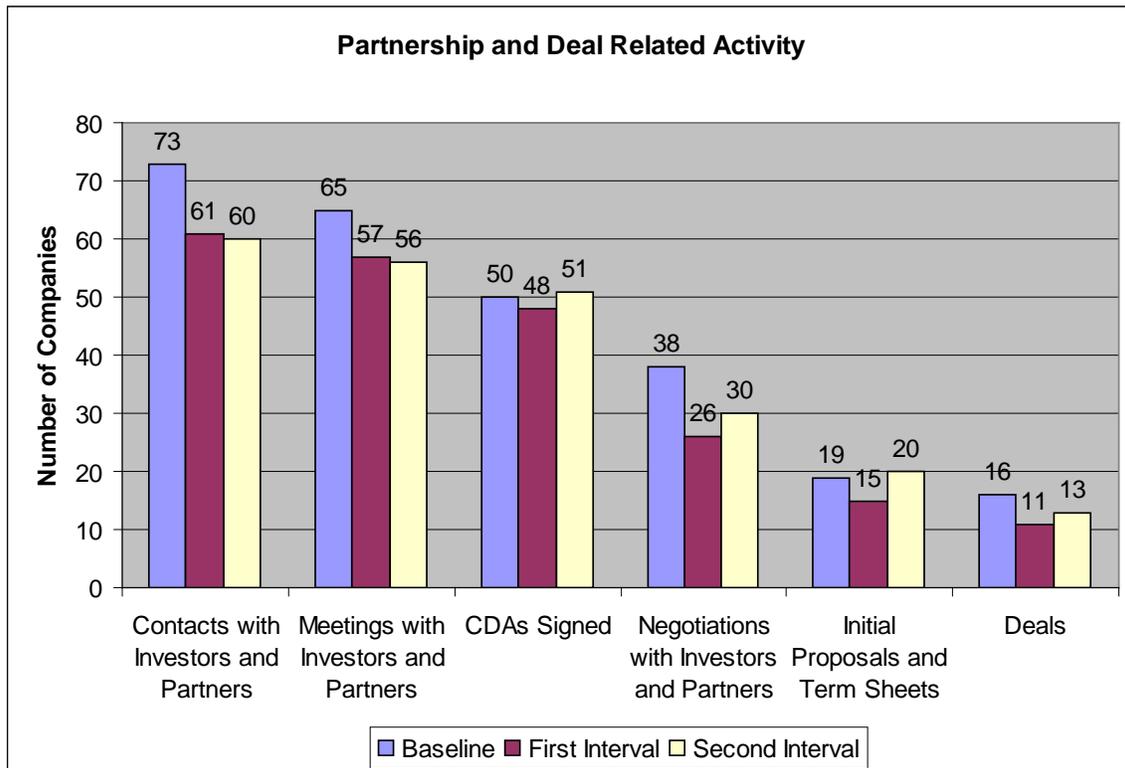
Activity in Partnerships and Financing Deals

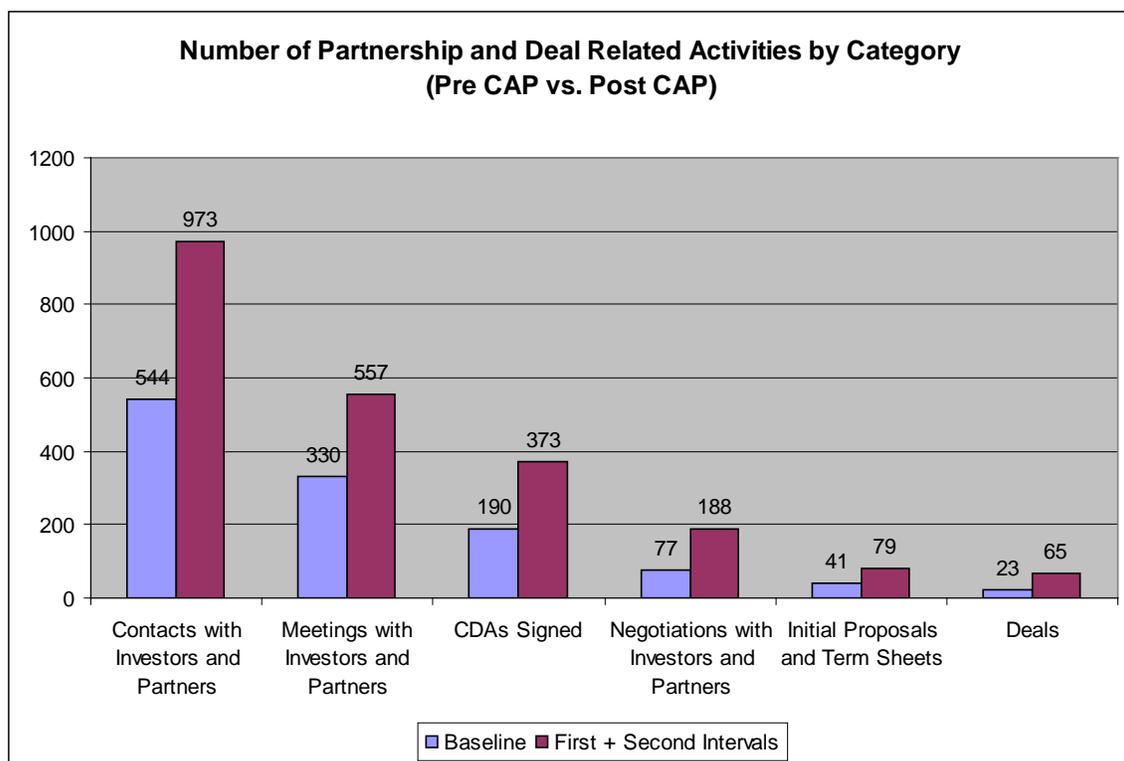
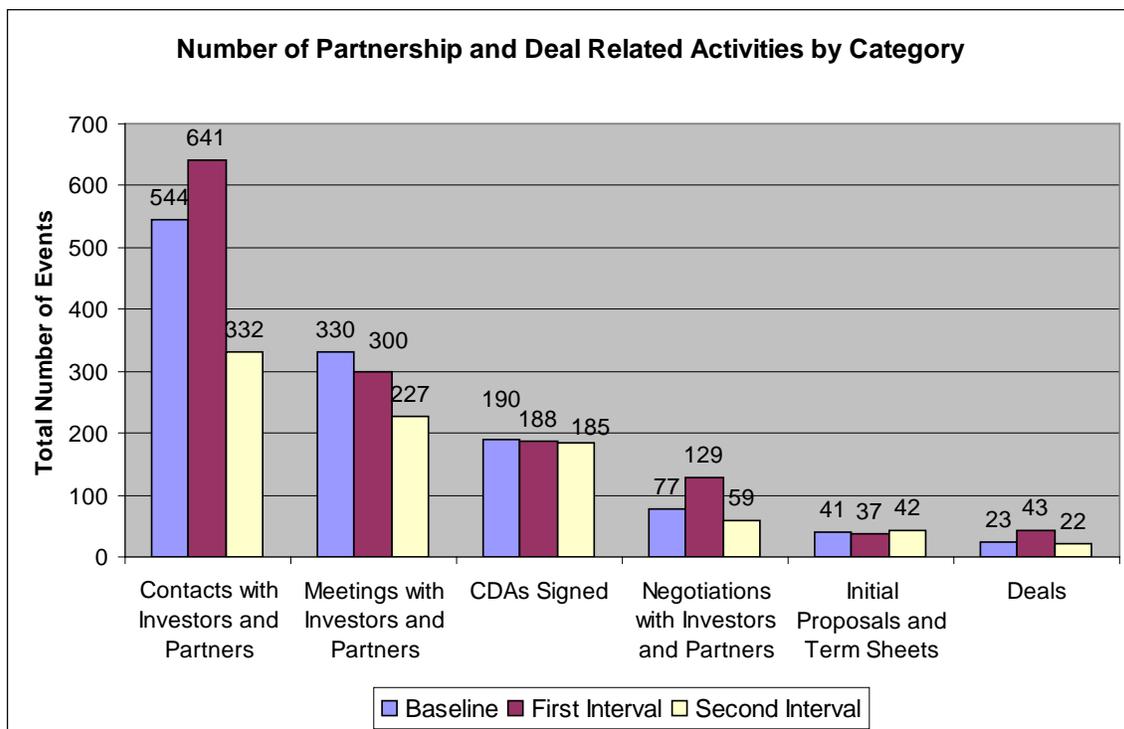
The chart below outlines commercialization progress with respect to partnership and financing deals, excluding the 29 companies that were non-responsive to the second interval tracking request. Out of the 80 companies that responded to the second interval tracking request, an encouraging 62 companies or 77% of the companies indicate commercialization progress in the partnership and financing deals area. This, however, is a drop from 67 companies or 87% of the companies out of the 77 that responded to the first interval tracking request that indicated commercialization progress.



“Progress” is defined as at least one event in at least one commercialization category shown in the table below:

The charts below indicate the number of companies engaged in multiple partnership and deal related activities and the aggregate number of partnership and deal 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 versus the baseline period.





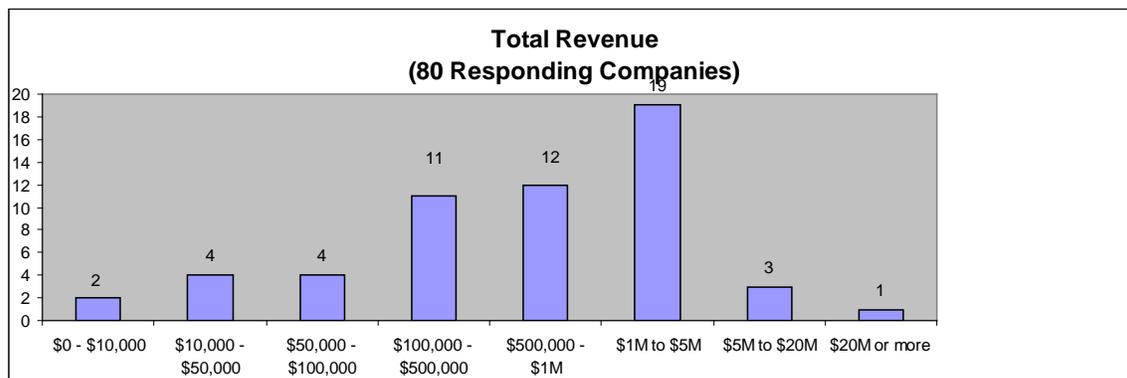
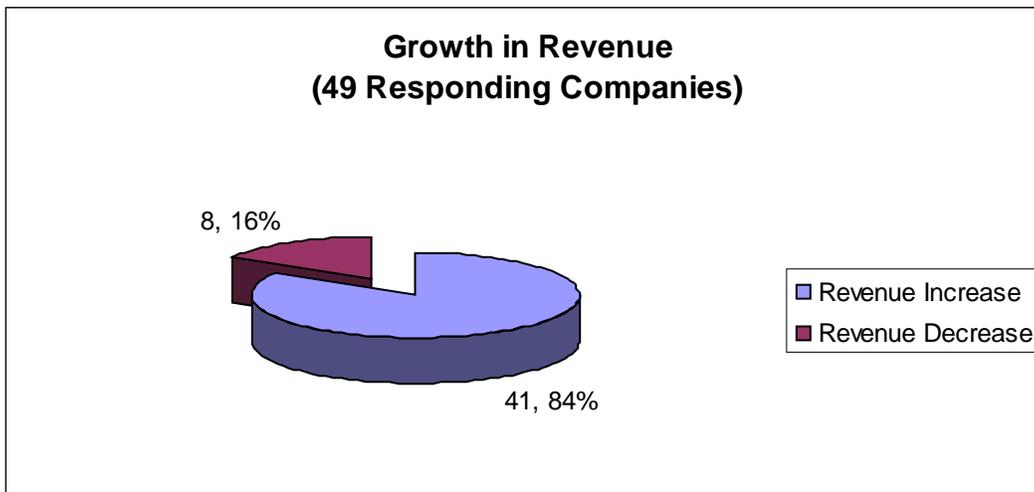
Key observations:

- Overall the intensity of partnership and deal related activities was greater in the intervals post CAP versus that in the baseline period. 65 deals were closed since the culmination of the CAP for the intervals (18 months) tracked post CAP.

- **NOTE:** For the second interval several companies provided qualitative data in their response to the partnership and deal related activity question. In these cases, we conservatively recorded one activity for each qualitative response per company or an average when a range was provided. Details are provided in the processed data. This implies a lower number of activities for the second interval for this category than what may have actually taken place.

Growth in Commercial Revenue

Note that the growth in revenue refers to the change in total company revenue rather than the revenue based on the CAP technology. This approach was taken in anticipation of the reluctance of companies to provide detailed revenue data.

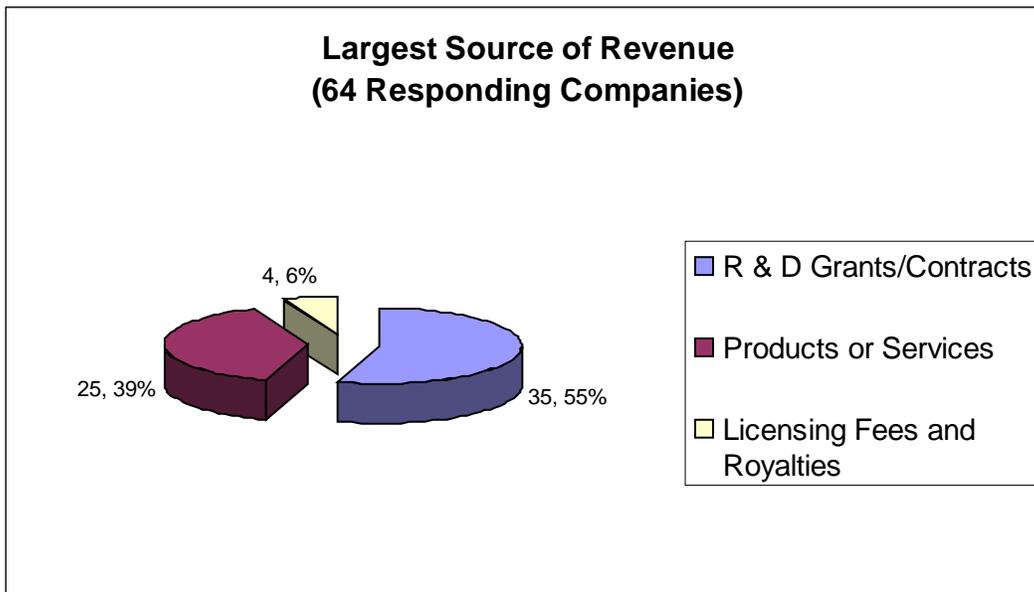


Key observations:

- 41 companies (84% of responding companies) have shown revenue growth.
- The highest revenue growth reported was \$5.7 million by [redacted] followed by \$1.9 million by [redacted] and \$1.2 million by [redacted].
- 23 companies reported a total revenue of over \$1 million of which 19 companies reported a total revenue between \$1 million and \$5 million. 3 companies reported total revenue of over \$10 million and 1 company a total revenue of over \$20 million. This is a significant improvement over the first interval where 1 company reported total revenue of over \$5 million and 11 companies between \$1million and \$5 million. See table below for top ten companies with respect to total revenue:

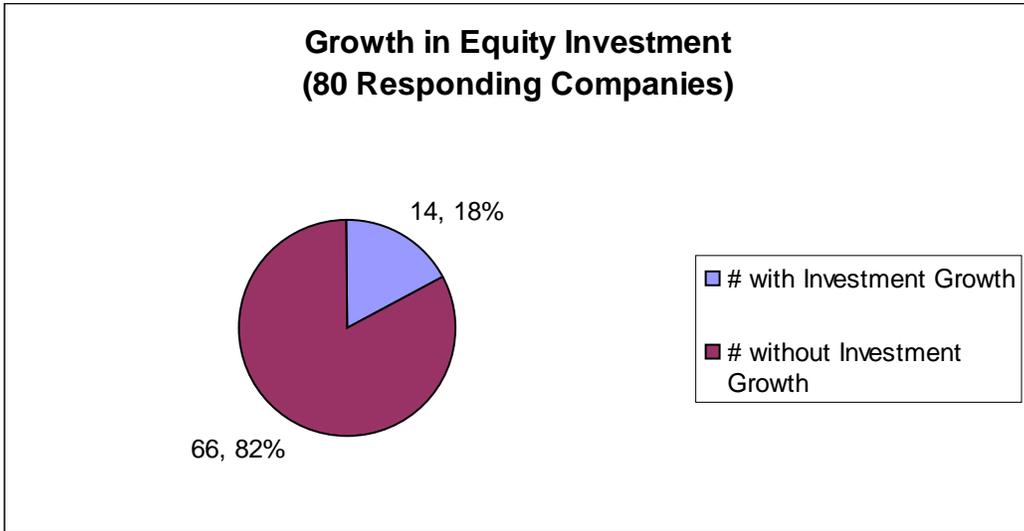
Company Name	Revenue
██████████	\$35,200,000
██████████	\$14,000,000
██████████	\$12,900,000
██████████	\$11,658,000
██████████	\$4,340,000
██████████	\$4,000,000
██████████	\$3,600,000
██████████	\$2,875,000
██████████	\$2,500,000
██████████	\$2,200,000

However, R&D Grants/Contracts remain the largest source of total revenue for 55% of companies, as shown below. This trend was observed for all three intervals tracked.

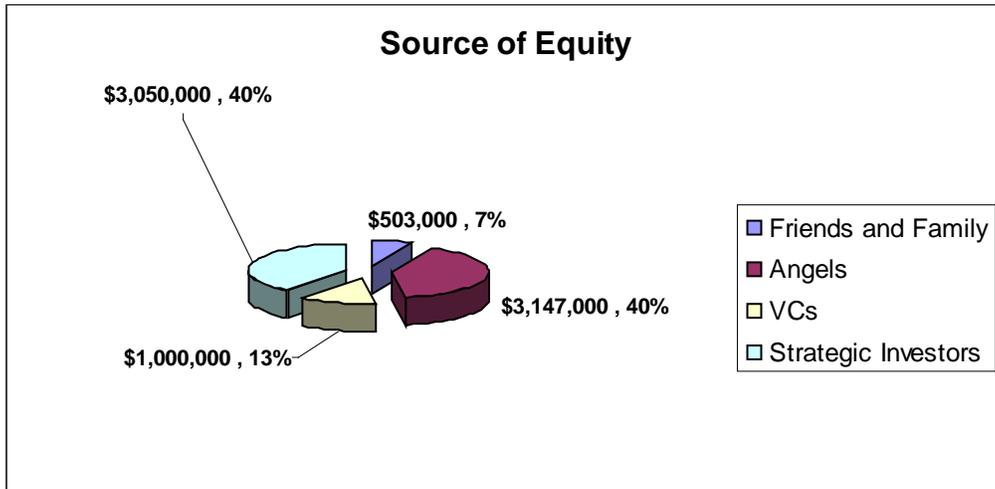


Growth in Equity Funding

The data refer to the growth of the equity funding for the company as a whole. 14 companies or 18% indicated an increase in equity funding and from one or more sources of equity funding; a slight decline from the first interval period of 16 companies or 21%.

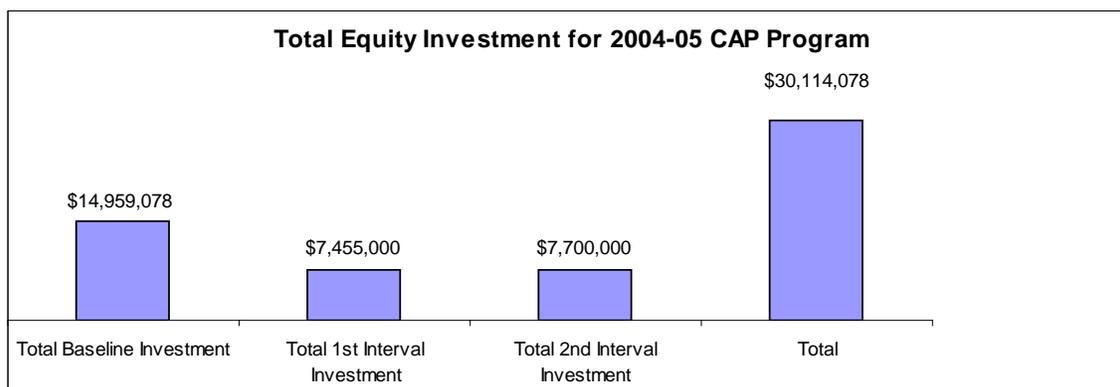
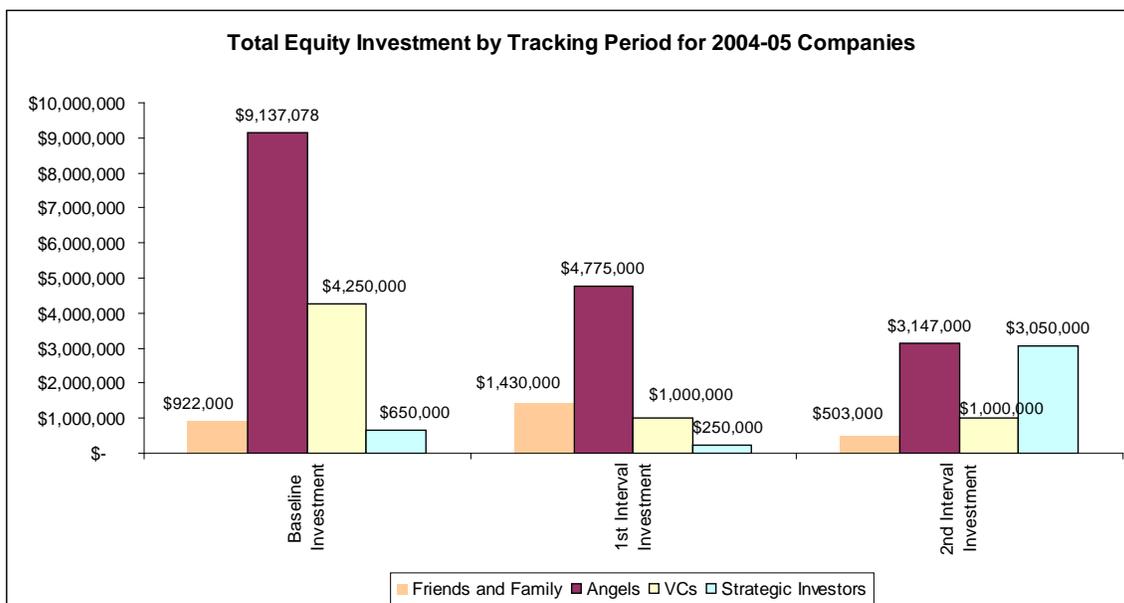
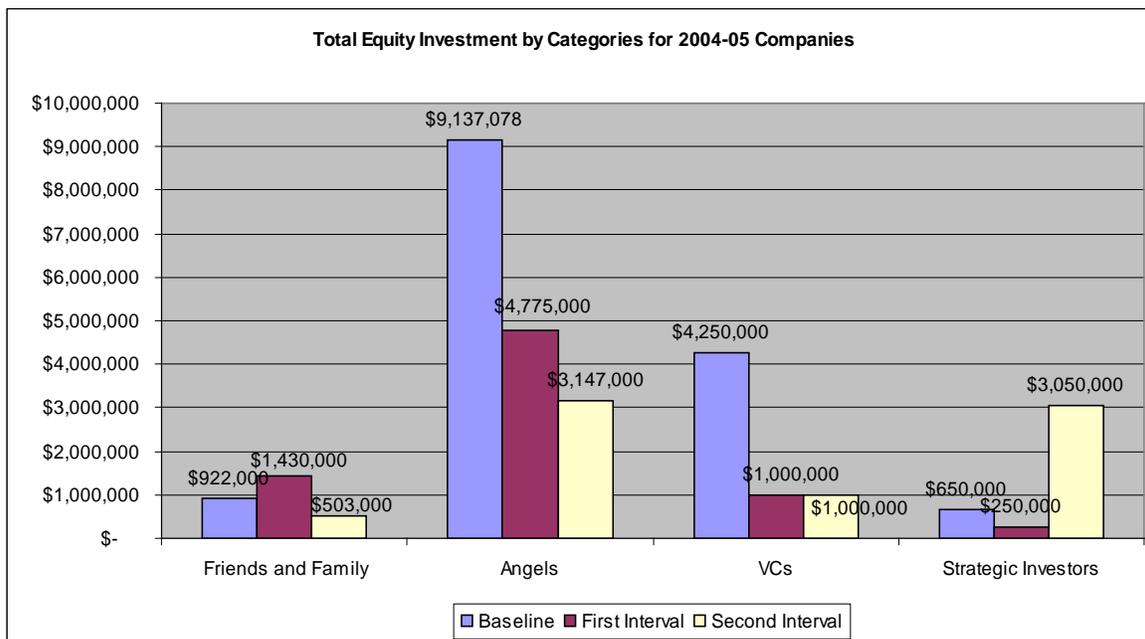


The total amount of new funding by source of funding is shown below.



Key observations:

- Angel funding and strategic investors accounted for the largest source of equity funding in the second interval. This is a positive change from the previous two interval periods where strategic investors accounted for an insignificant portion of the total equity funding received.
- \$7.7 million was raised by 17 CAP companies compared with \$7.5 million by 16 CAP companies in the first interval and \$15 million in the baseline period.
- The bulk of funding went to [REDACTED] (\$2.6 million from strategic investors), [REDACTED] (\$1.4 million in angel funding) and [REDACTED] (\$650K in venture funding).

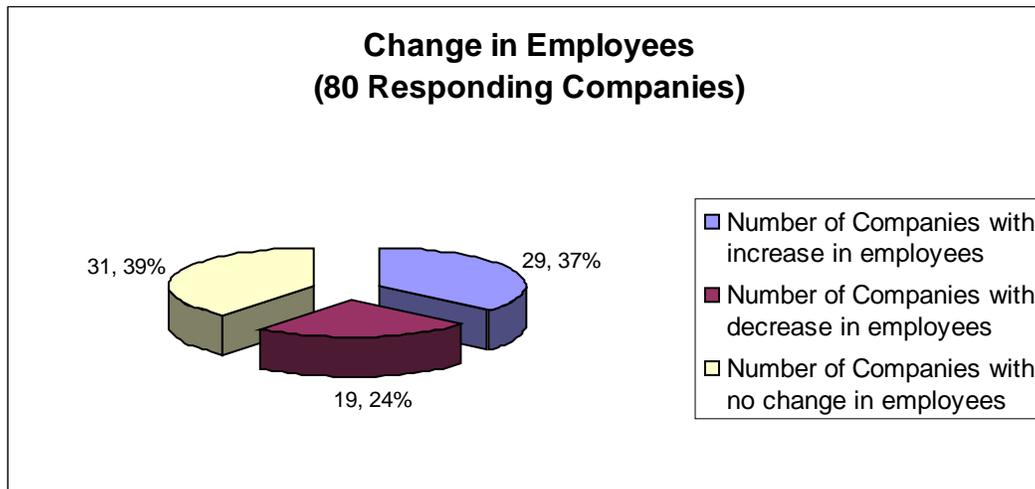


- Overall angel funding (\$17 million) accounted for the largest source of funding for the 2004-05 companies for their entire tracking period, followed by VC funding (\$6 million), strategic investment (\$4 million) and friends and family (\$3 million). Note [REDACTED] secured \$2.6 million in strategic investment in the second interval which constitutes 65% of the total strategic investment received by the 2004-05 CAP companies.
- Angel funding was also the largest source of funding for each interval. Venture funding declined for the intervals post CAP at \$2 million versus \$4.2 million during the baseline. Strategic investment increased for the intervals post CAP at \$3.3 million versus \$650K during the baseline.
- The amount of equity investment received in the baseline period is about equal to that received post CAP or during the first and second intervals. The aggregate amount of equity investment received by the 2004-05 CAP companies is approximately \$30 million for the entire tracking period.

Other Success Indicators

Employees

29 companies or 37% of the respondents indicated an increase in the number of employees, not a marked difference from the first interval period.



Mergers & Acquisitions

- 1) [REDACTED] was acquired during the second interval period by [REDACTED].
- 2) [REDACTED] was acquired during the second interval period by [REDACTED].

CAP Impact

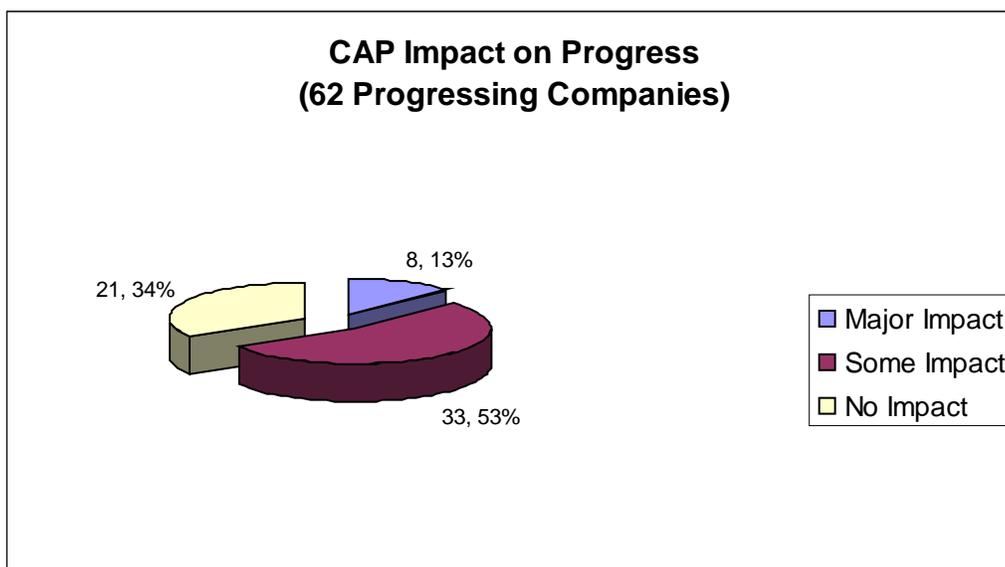
CAP Impact was rated by the companies as either 1) Major, 2) Valuable, 3) Minor or 4) No Impact. CAP impact was determined for the following activities that have been addressed earlier in the report.

- Activity in Partnerships and Financing Deals
- Growth in Revenue
- Growth in Equity Investment

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, the results of which have been submitted to NIH.

Activity in Partnerships and Financing Deals

Progress is defined as at least 1 activity in at least 1 of the partnership and financing deal categories.



Key observations:

- 8 companies have attributed the CAP with major impact and 33 companies have attributed the CAP with some impact compared with the first interval where 7 companies attributed the CAP with major impact and 33 companies attributed the CAP with some impact. The 8 companies that have attributed the CAP with a major impact in this category are: [REDACTED]
- 66% of the progressing companies have attributed some or major impact to the CAP on partnership and deal related activities compared with 62% in the first interval and 40% in the baseline. This data is encouraging as more time has elapsed since the culmination of the CAP and CAP impact remains high despite a fall in the intensity of partnership and deal related activity in the second interval compared to the first interval and baseline period.
- **NOTE:** Currently the tracking form does not capture whether the company is pursuing partnership and financing activities and as a result, the 34% of companies attributing the CAP with no impact for this category may not accurately reflect actual CAP impact.

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

"[REDACTED] recently employed an investment banking firm recommended by one of our coaches from the NIH CAP program. He will be handling the negotiations and strategy for our partnership deals. If all goes well, this could have a major impact on our success."

"The CAP program provided excellent insight into what may be expected from both investors & potential partners in discussions. Interest from the investment community continues to increase as the product nears launch."

"We would not have obtained the [REDACTED] investment without the attitude adjustment provided by CAP."

"The business plan that we developed throughout the program is of great value to us."

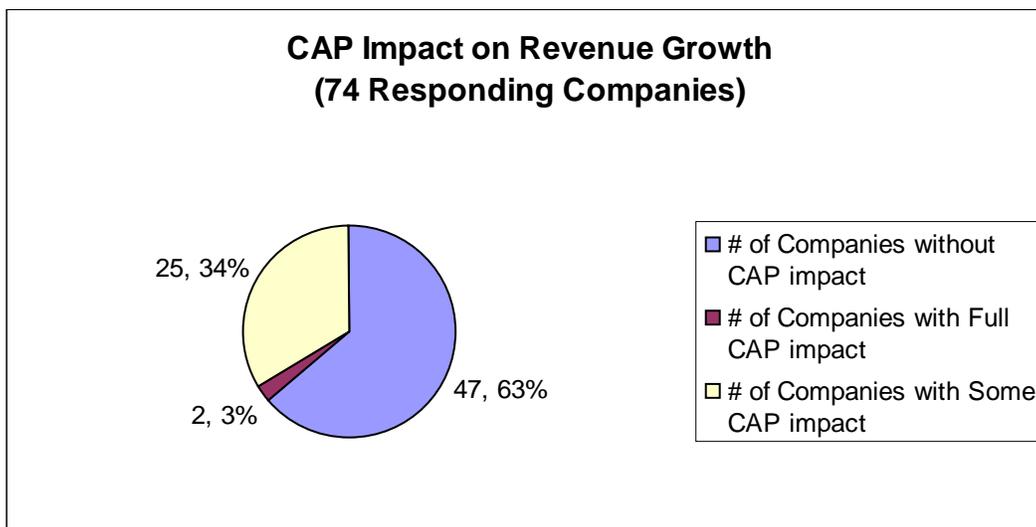
"The CAP taught us what is important in talking to potential partners and investors."

"LARTA mentors have continued to work with us to expand technology and bring our products to market."

"The lessons learned in CAP and the information generated are necessary for the discussions...to be started much less proceed with any confidence"

"It takes time to build up momentum and credibility with potential strategic partners. Our efforts have finally paid off, and I believe that we will sign 1 or 2 major agreements within the next 30-60 days. The lessons learned in CAP gave us a foundation that we could build upon. Even though there may no longer be a direct influence in day to day activities, the general knowledge learned got us started and is still very important in helping us to continue to make progress."

Growth in Revenue



The above chart shows the impact that CAP had on the companies' revenue growth.

Key observations:

- 27 companies or 37% of the companies that responded to the tracking effort have attributed the CAP with impact on revenue growth. 2 of these 26 companies, [REDACTED] attributed the CAP with full impact on revenue. The majority of companies do not attribute the CAP with an impact on revenue growth, which is no different from the trend in the previous two tracking intervals.
- [REDACTED] found the CAP to have a full impact on its revenue growth stating,
- "Sales doubled in 2006 and in part this is due to the assistance from CAP."

Other comments include:

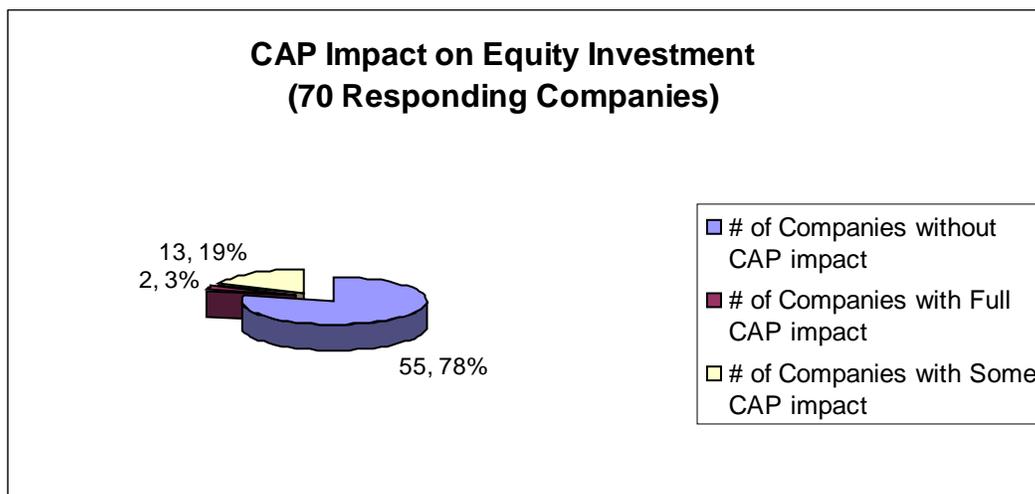
"The patent-pending products we developed as a result of our SBIR funding most certainly have contributed to revenue growth in 2006. The CAP program seminars helped us to maximize the

commercial potential of the products and appreciate the full range of commercialization and financing options.”

“This has been a difficult period for the company, as our grant and contract funding decreased and contract R&D for other companies became the major source of revenue. We are in the process of re-tooling our own R&D activities, this time with a corporate partner involved from the beginning. We think this approach will avoid the risk of completing development of a product and not having the resources to complete commercialization.”

”Most of the CAP activities were focused on fund raising. We explored marketing and sales strategies which did have some impact on the sales achieved in 2006, and have set the stage for 2007. I anticipate that revenue will increase 10 fold this year.”

Growth in Equity Funding



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

Key observations:

- 15 or 21% of the companies have attributed the CAP with impact on growth in equity investment. 2 of these 13 companies, [REDACTED] and [REDACTED] attributed the CAP with full impact on equity investment. This compares with 15% in the first interval and 18% in the baseline period.
- **NOTE:** Currently the tracking form does not capture whether the company is actually seeking equity investment and as a result, the 78% of companies attributing the CAP with no impact for *this category* may not accurately reflect actual CAP impact. There were companies that indicated “No Impact”, but from written comments, we decided that they were not seeking equity investment. These cases are currently included in 55 “No Impact” companies in the chart above. From the tracking form it is unclear if the company was seeking investment and did not receive any, therefore providing CAP “No Impact” as opposed to companies that were not seeking funding, did not receive any as a result, and provided CAP with a “No Impact” rating. Efforts will be made in the future to clarify this very important distinction between companies that are seeking equity investment and those that are not. This will yield more accurate CAP impact data.

Comments on growth in equity funding include:

[REDACTED] expects to complete a \$650,000 Bridge Financing by the end of March 2006, consisting of: 1) \$150,000 from individual angel investors in the form of convertible notes,

\$250,000 from an angel fund in the form of convertible notes, and 3) a \$250,000 Strategic Growth Loan from the [REDACTED].

“The understanding of the investor mentality which I received at CAP formed the basis for presentations made and business plans written. This ultimately resulted in the \$2.6 M investment by the [REDACTED].

“As we presented to Angel and Institutional Investors, we took our presentations and knowledge gained from CAP and fine-tuned them over time. We presented to at least 10 Institutional investor groups and there is serious interest from a few of them, although we would prefer to pursue strategic alliances/investment if possible. One has even asked if we would accept a term sheet, but we declined for the moment. We just raised another \$750K from angels in May.”

Summary

The response to the second interval of progress tracking is encouraging with a response rate of 74%. As in previous intervals, the companies are actively pursuing various commercialization channels, including fund raising and strategic partnerships with some companies being successful at closing deals and others engaging in acquisitions. 62 companies or 77% of the companies indicated commercialization progress in the partnership and financing deals area. 23 deals were closed during the baseline period and 65 deals were closed since the culmination of the CAP. The aggregate amount of equity investment received by the 2004-05 CAP companies is approximately \$30 million, with angel funding being the largest source of capital. 41 companies or 84% of the responding companies have shown revenue growth. 29 companies or 37% of the respondents indicated an increase in the number of employees. 2 acquisitions took place in the second interval.

The CAP has been successful in impacting company partnering and financing efforts especially, although the impact on revenue continues to be modest. Note that CAP impact data on some categories based on the way data collection is currently approached may not accurately reflect the true and full impact of the program. Efforts will be made to approach data collection differently to avoid this issue in the future. See below results summarized for all three intervals:

2004-05 Company Tracking Data by Categories over the Entire Tracking Period

	BASELINE	FIRST INTERVAL	SECOND INTERVAL	POST CAP (1 st +2 nd INTERVALS)
Revenue Growth Number of Companies	36	29	41	70
Revenue Growth Amount	N/A	\$11.3M	\$16.6M	\$27.9M
Equity Investment Number of Companies	18	16	17	33
Equity Investment Amount	\$15M	\$7.5M	\$7.7M	\$15.2M
Employment Growth Number of Companies	78	31	29	60
Employment Growth Amount of Growth	87	138	83	221

Total Partnerships and Deal Related Activities

	BASELINE	FIRST INTERVAL	SECOND INTERVAL	POST CAP (1 st +2 nd INTERVALS)
Contacts with Investors and Partners Number of Companies	73	61	61	122
Contacts with Investors and Partners Number of Contacts	544	641	332	973
Meetings with Investors and Partners Number of Companies	65	57	57	114
Meetings with Investors and Partners Number of Meetings	330	300	227	527
CDAs Assigned Number of Companies	50	48	52	100
CDAs Assigned Number of CDAs	190	188	185	373
Negotiations with Investors and Partners Number of Companies	38	26	31	57

	BASELINE	FIRST INTERVAL	SECOND INTERVAL	POST CAP (1st+2nd INTERVALS)
Negotiations with Investors and Partners Number of Negotiations	77	129	59	188
Initial Proposals and Term Sheets Number of Companies	19	15	21	36
Initial Proposals and Term Sheets Number of Proposals	41	37	42	79
Deals Number of Companies	16	11	14	25
Deals Number of Deals	23	43	22	65

APPENDIX A

2004-05 CAP companies relieved from tracking:

Company Name	Notes
[REDACTED]	Relieved of further tracking as company was involved in the program for a very short period.
[REDACTED]	[REDACTED] has now dissolved and closed out with the NIH.
[REDACTED]	Relieved from further tracking upon company's request and also it attributing no impact to the CAP.
[REDACTED]	Company feels that it is in very early stages of development and would like to be tracked once they make some headway with their technology and its commercial application.
[REDACTED]	The company has completed CAP requirements, but has requested to be relieved from further tracking.
[REDACTED]	[REDACTED], CAP leader has left the company and the company cannot commit to the remainder of the program.

APPENDIX B

NIH-CAP 2004/2005

COMMERCIALIZATION PROGRESS TRACKING FORM- INTERVAL TWO

April 1 2006-Dec 31 2006

PLEASE RETURN BY FEBRUARY 19, 2007 TO KSOOD@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. This **last interval** of tracking will cover your progress during the period of April 1 2006 to December 31 2006. NIH is very interested in your commercialization progress and if the CAP program was effective. The information may also be beneficial to you as a management tool to periodically assess your company's progress and growth.

The tracking form is divided into four parts: (1) partnerships and financing deals, (2) revenue (3) equity investment, (4) and other success indicators (employees, acquisitions). It's difficult to measure the impact the CAP may have had on you progress, however, questions have been included to allow for your opinion to be expressed.

1. PARTNERSHIPS AND FINANCING DEALS

- a) As it relates to your CAP-related technology, please indicate your company's progress with respect to partnerships and financing deals. State the number of partnership and deal-related activities in which your company has engaged in between April 1 2006 and December 31 2006. If you are pursuing both partnering and financing, add the numbers together.

	Number of Partnership and Deal Related Activities Your Company Has Engaged in Between April 1 2006 and December 31 2006	Describe Significant Outcomes
Contacts with Investors and Partners Count only contacts you had a meaningful conversation with about your mutual interests		
Meetings with Investors and Partners Meetings can be face-to-face or by phone/web but should involve exploration of potential deals in some detail.		

	Number of Partnership and Deal Related Activities Your Company Has Engaged in Between April 1 2006 and December 31 2006	Describe Significant Outcomes
Confidential Disclosure Agreements signed CDA (NDA) agreements are generally a pre-requisite for any serious discussion with potential partners. Investors generally do not sign CDAs.		
Negotiations with Investors and Partners At this stage, all parties are interested in the deal and you are exploring various give and take.		
Initial Proposals and Term Sheets These are proposals of key terms of the deal and serve as the basis for the final agreement.		
Deals Signed legal documents and money in the bank. Please indicate the dollar amount of each deal.		

b) Please indicate the impact of the CAP on your partnering and financing activities for the period April 1 2006 to December 31 2006.

___ Major Impact ___ Valuable Impact ___ Minor Impact ___ No Impact

Comments:

2. REVENUE

Please report the results for the whole company and not just your CAP-related technology. Do not include SBIR grants or other government contracts (except when asked about R&D Grants/Contracts in c) below).

a) Please state the change in total company revenue between 2005 (in the period April 1 2005 to December 31 2005) and 2006 (in the period April 1 2006 to December 31 2006).

_____ (\$millions)

b) Please state the *total revenue* as of December 31, 2006

_____ (\$millions)

c) Please indicate the largest source of revenue (Choose one)

R&D Grant/Contracts _____ Products or Services _____ Licensing Fees & Royalties _____

d) Please indicate the impact of the CAP on the change in company revenue for the period

April 1 2006 to December 31 2006.

____ Major Impact ____ Valuable Impact ____ Minor Impact ____ No Impact

Comments:

3. EQUITY INVESTMENT

a) Please state the total amount of equity investment received by the whole company INCLUDING your CAP-related technology in the time period April 1 2006 to December 31 2006

	Amount of Equity Investment
Friends & Family	
Angels High net worth individuals; always invest as individuals although may belong to angel organizations.	
VCs Institutional investors	
Strategic Investors Investors that are looking to achieve other goals in addition to financial returns. Typically corporations seeking to fill or expand their product lines.	

b) Please indicate the impact of the CAP on equity investment received for the period

April 1 2006 to December 31 2006.

____ Major Impact ____ Valuable Impact ____ Minor Impact ____ No Impact

Comments:

4. OTHER SUCCESS INDICATORS (EMPLOYEES, ACQUISITIONS)

a) Have the number of employees in your company increased since April 1 2006? If yes, please specify the number of employees in April 1, 2006, versus the current number of employees, and the titles/positions of the new employees.

	Employee Information
Number of Employees in July 1, 2005	
Current Number of Employees	

b) Has your company been acquired? Yes ____ No ____

If yes, please provide the following information.

	Acquisition Information
Name of the Acquiring Company	
Change in Company Name as a Result of the Acquisition	
Change in Company Contact Information as a Result of the Acquisition	
Additional Details	

THANK YOU FOR YOUR PARTICIPATION IN THE 2004/2005 CAP AND FOR YOUR FEEDBACK. IT WAS A DELIGHT TO WORK WITH YOU AND WE WISH YOU CONTINUED SUCCESS.