



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



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

NIH-CAP 2007-08

Baseline Tracking Report

for the period

September 1, 2007-June 30, 2008

Table of Contents

Background and Introduction.....	3
The Tracking Form	3
Response Rate	3
Commercialization Progress	4
Partnership and Deal Related Activities.....	4
Commercial Revenue	7
Equity Funding	8
Employees	11
Mergers & Acquisitions	12
CAP Impact.....	12
Activity in Partnerships	12
Revenue	13
Equity Funding, Bank Loans and Other/Alternative Financing	14
Summary	15
APPENDIX A	17

Background and Introduction

Larta tracks the progress of NIH-CAP participating companies for an 18-month period in two 9-month intervals, plus a baseline period, which spans the duration of the program. This report provides progress tracking results for the companies that participated in the CAP in 2007-08, for the baseline period Sept. 1, 2007- June 30, 2008. This report presents only a summary of the data. Detailed source data can be found in a separate excel file (Processed Tracking 2007-08 Companies Baseline.xls). We discuss first the overall commercialization progress and then separately evaluate direct CAP impact.

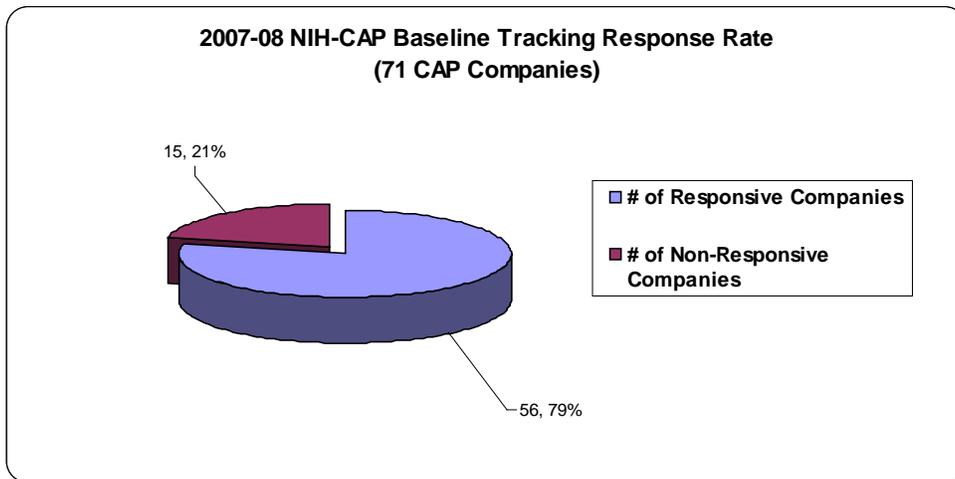
The Tracking Form

The fourth year of the CAP for NIH SBIR Phase II grantees was launched in August 2007. 71 companies completed the program in June 2008. At the end of the program, all 71 companies were sent baseline tracking forms. 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 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 CAP impact are indicative of CAP significance. Companies rated the CAP impact as 1) Major, 2) Valuable, 3) Little or No Impact.
- With the question on revenue, the largest source of revenue was solicited from companies and for them to explicitly state commercial revenue vs. revenue from R&D grants and contracts.
- Companies were further divided into eight different categories based on their yearly revenue amount as 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 as a response to companies’ reluctance to provide exact revenue figures in previous tracking efforts.
- The tracking form for the 2007-08 baseline period was modified 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 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 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 as a response to previous tracking experiences where companies often did not take into consideration the program’s indirect influence on their commercialization progress.

Response Rate

On July 31, 2008, 71 of the 2007-08 NIH-CAP companies were sent the tracking form from Kay Etzler at NIH. 56 of the resulting 71 companies responded to the tracking request, after several email reminders; a 79% response rate. This is a marked improvement compared to the baseline period for the 2006-07 CAP companies where the response rate was 74%.



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:

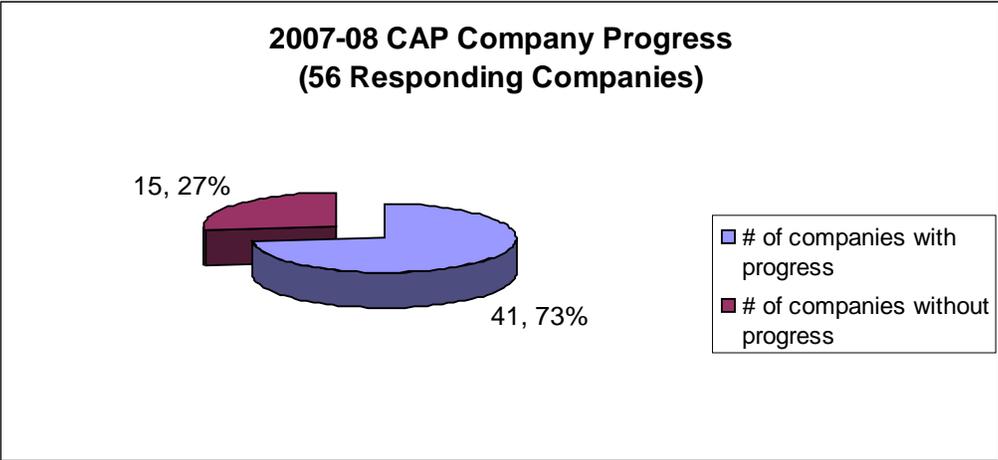
- Partnership and Deal Related Activities
- Revenue
- Funding via Equity Investment, Banking or Other/Alternative Financing
- Growth in Employment
- Acquisitions

Partnership and Deal Related Activities

The chart below outlines company objectives with respect to partnership and deal related activities. When analyzing the number of companies that are seeking only partnership or only financing, a greater emphasis is observed on partnerships than on financing (27% versus 16%). This result reflects the growing trend of early stage life science startups steering towards potential partnerships, especially with large pharma and biotech. The VC environment although much improved from previous years, especially for early stage technologies, remains saturated and competitive, therefore not surprising that the NIH-funded SBIR companies are seeking alternative sources of funding and exit in the form of partnerships.



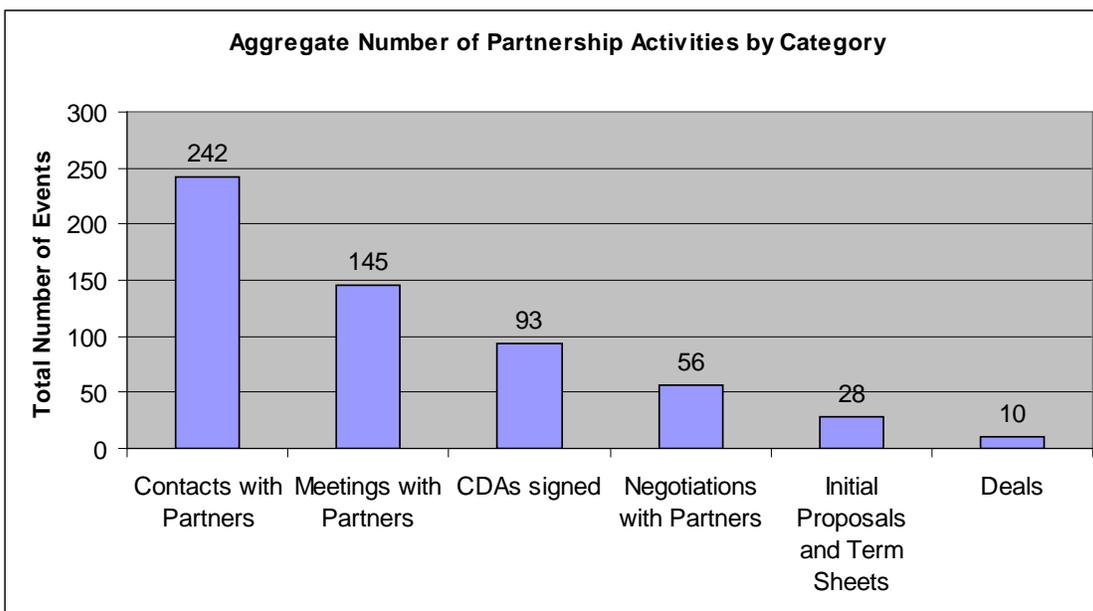
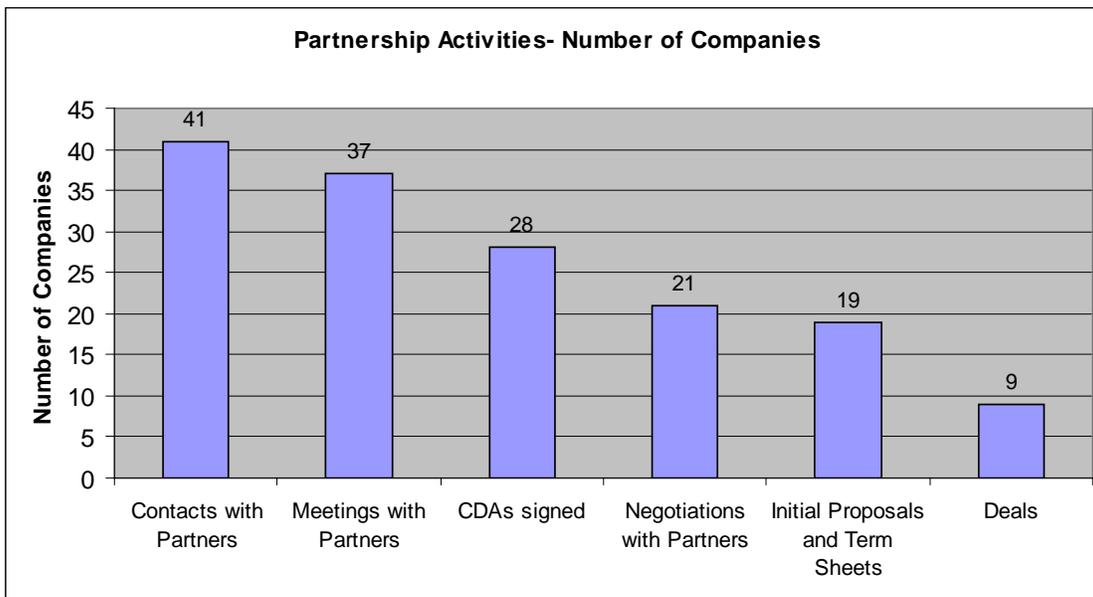
The chart below outlines commercialization progress with respect to partnership and deal related activities, excluding the companies that were non-responsive to the tracking request. Out of the 56 companies that responded to the baseline tracking request, 41 companies or 73% of the companies indicate commercialization progress in the partnership related activities area. This 73% rate is lower than the baseline results from the previous two years' programs; 2006-07 reported a 77% rate and 2005-06 companies reported an 88% rate.



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 Partners
2. Meetings with Partners
3. CDAs signed
4. Negotiations with Partners
5. Initial Proposals and Term Sheets
6. Deals

The charts below indicate the number of companies engaged in multiple partnership related activities and the aggregate number of partnership related activities by category.



Key observations:

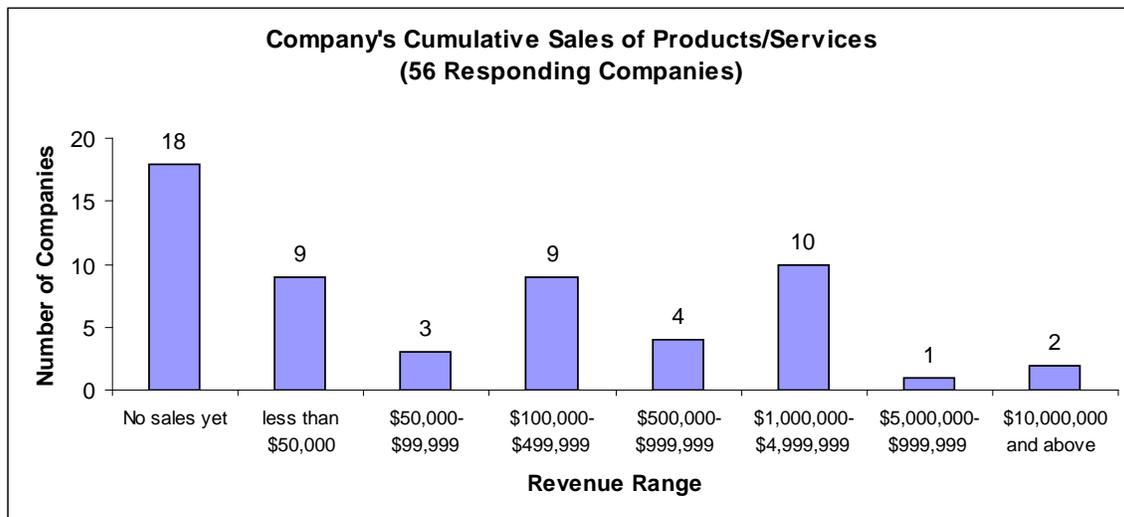
- 24% of the companies reported deals for the 2007-08 companies during the baseline period, a substantial decrease compared with 44% for the 2006-07 companies during the baseline period. It is slightly higher than 23% for the 2005-06 companies.
- The table below provides the list of companies that engaged in deals.
- Most companies signed one deal on average. However, [REDACTED] reported a notable deal worth \$12M.

Company	Deals
[REDACTED]	2
[REDACTED]	1

Company	Deals
[REDACTED]	1
Total	10

Commercial Revenue

Changing our analyses from the previous years, we requested companies to state their revenues within particular ranges rather than reporting the increase in revenue growth.



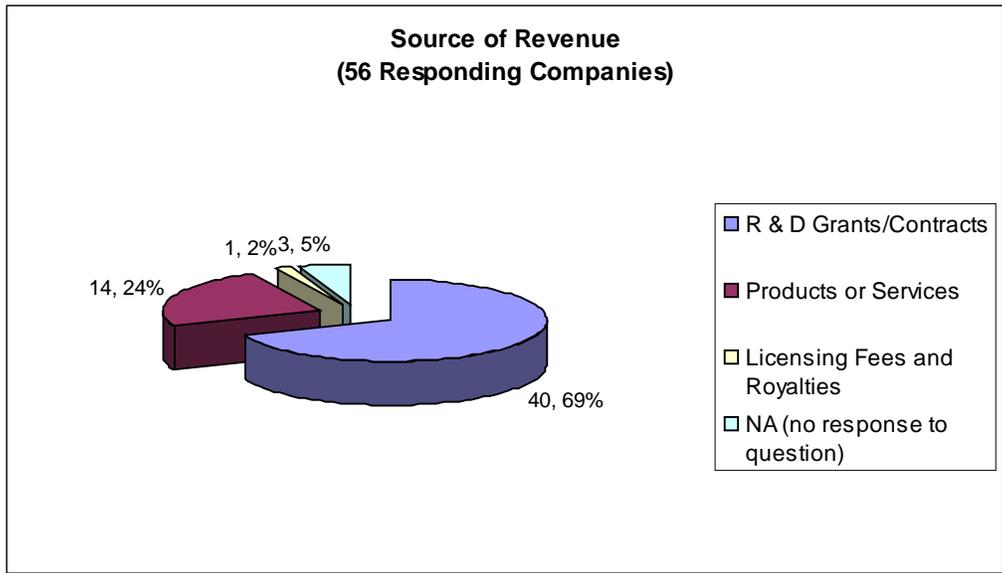
Key observations:

- 18 companies or 32% of the total companies reported no revenues to date.
- Two companies reported revenue over \$10million and one company reported revenue over \$5 million. 10 companies reported revenue between \$1 million and \$5 million, both are lower than the previous CAP year (4 and 13).
- The two companies in the highest revenue range of \$10 million and above were [REDACTED], with revenue of \$40 million and \$13.6 million respectively. See list of companies that reported a total revenue of over \$1 million below:

Revenue Range \$1M - \$5M	Revenue Range \$5M - \$10M	Revenue Range \$10M and above
[REDACTED]	[REDACTED]	[REDACTED]

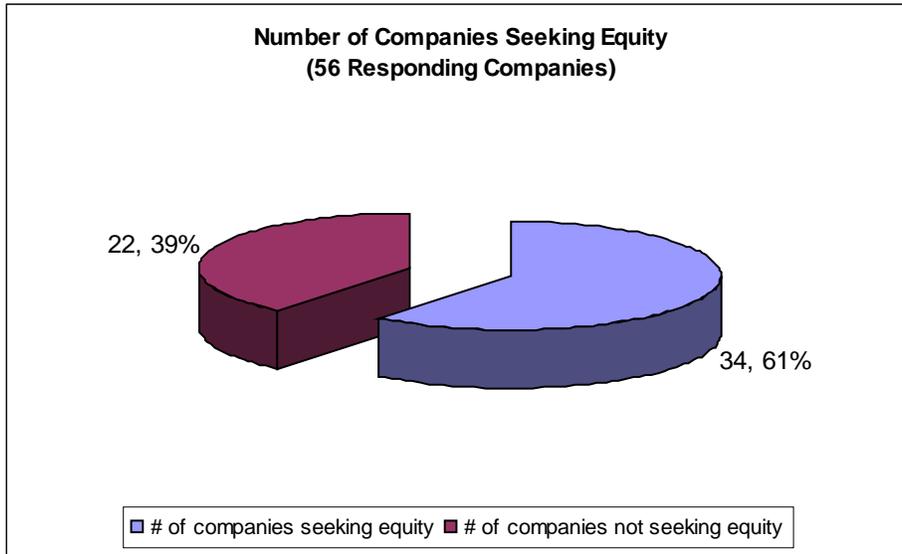
Revenue Range \$1M - \$5M	Revenue Range \$5M - \$10M	Revenue Range \$10M and above
██████████	██████████	██████████
██████████		██████████
██████████		
██████████		
██████████		
██████████		
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R&D Grants/Contracts remain the largest source of total revenue for 69% of companies, as shown below. This represents an increase from the 2006-07 baseline tracking period where R&D Grants/Contracts accounted for 63% of the total sources of revenue. However, revenue from products or services increased from 19% in the 2006-07 baseline period to 24% in the 2007-08 baseline tracking period. Licensing and royalties continue to account for a relatively small portion of revenue as has been observed in past tracking intervals as well.

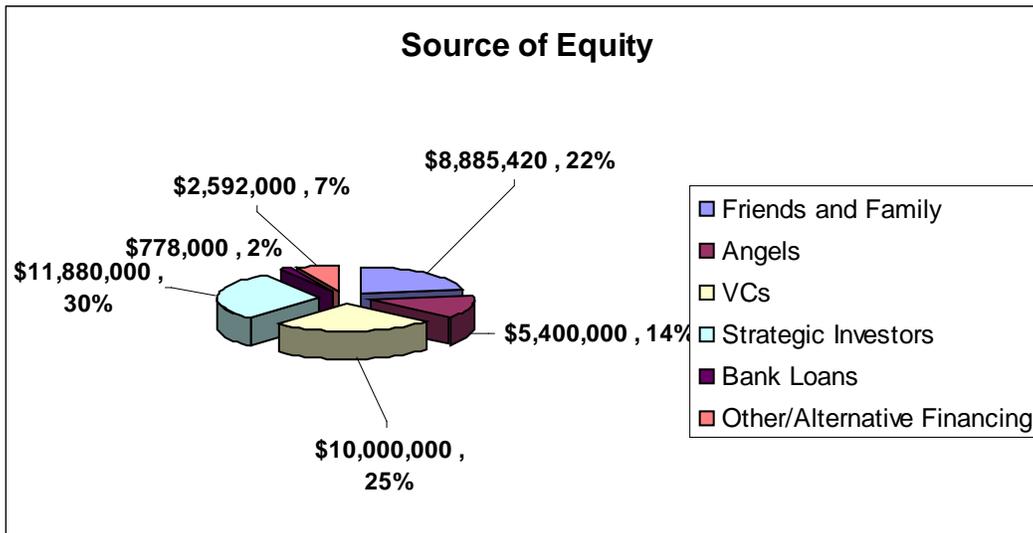


Equity Funding

34 or 61% of the responding companies stated that they were seeking equity funding. This is a significant increase when compared to 42% seeking equity funding in the 2006-07 baseline period.



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



Key observations:

- Strategic investors accounted for the largest source of equity funding, a notable change from previous year baseline tracking in which VCs were the largest source. However, the number of companies that raised money from strategic investors remained the same at 6 companies. Only 2 companies raised more than \$1 million from strategic investment. Also, an outlier (██████████) greatly influenced total money raised from strategic investors in the 2007-08 baseline period reporting \$9 million from strategic investors. See funding from strategic investors by company below:

Company	Strategic Investment
██████████	\$ 9,000,000
██████████	\$ 2,330,000

Company	Strategic Investment
██████████	\$ 200,000
██████████	\$ 200,000
██████████	\$ 100,000
██████████	\$ 50,000
Total	\$ 11,880,000

- In the 2007-08 baseline period, VC funding accounted for 25% of the overall funding and was the second largest source. Of notable mention is the fact that all the VC funding was basically obtained by one company, ██████████, which raised \$10 million in VC money.
- Friends and Family accounted for the third largest portion of financing with 22% of the total money raised, not seen in the past for comparable periods. Those of significant mention include ██████████ which raised \$8 million from friends and family. Five other companies also received money from friends and family, none of which were for more than \$1 million. See funding from friends and family by company below:

Company	Strategic Investment
██████████	\$ 8,000,000
██████████	\$ 675,000
██████████	\$ 130,000
██████████	\$ 40,000
██████████	\$ 30,420
██████████	\$ 10,000
Total	\$ 8,885,420

- With regards to angel funding, the total amount is lower in 2007-08 compared to 2006-07. From 2006-07, an outlier company ██████████ reported \$10 million in angel funding. Overall, the number of companies that successfully raised money from angels in 2007-08 (2) is also fewer than that in 2006-07 (8).
- Bank Loans and Other/Alternative Financing together accounted for 9% of the total funding effort, with ██████████ obtaining \$1.5 million in alternative financing. See funding from bank loans and other/alternative financing below:

Company	Bank Loan	Other/Alternative Financing
██████████		\$ 1,500,000
██████████		\$ 542,000
██████████		\$ 500,000

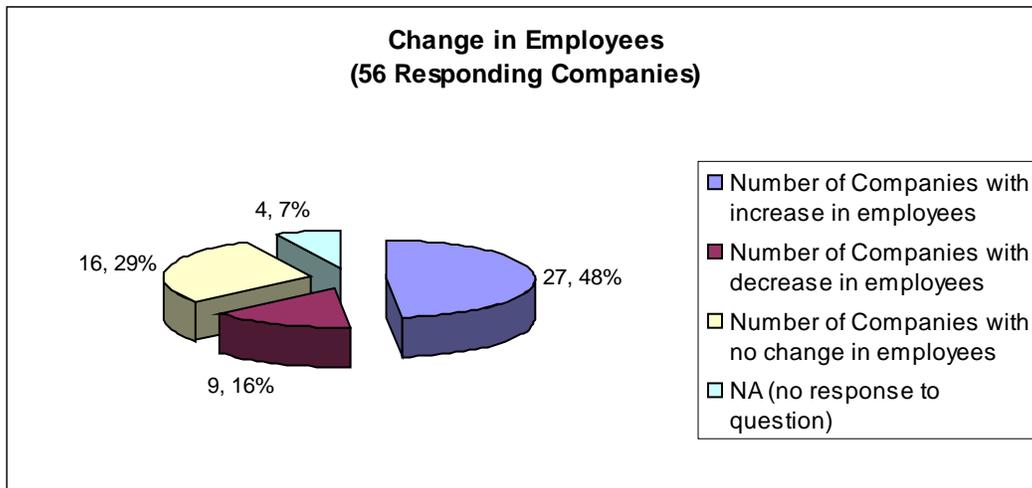
Company	Bank Loan	Other/Alternative Financing
██████████	\$ 250,000	
██████████	\$ 200,000	
██████████	\$ 150,000	
██████████	\$ 135,000	
██████████		\$ 50,000
██████████	\$ 43,000	
Total	\$ 778,000	\$ 2,592,000

- In total, \$39.5 million was raised by the 24 CAP companies that were successful with equity investment in 2007-08. In comparison to 2006-07, 19 companies raised a total of \$55 million. Total equity investment was lower in the 2007-08 baseline period compared to the previous year by close to \$16 million or a 29% decrease.
- The bulk of funding went to three companies: ██████████ (\$10 million total equity funding), ██████████ (\$9 million total equity funding), ██████████ (\$8 million total equity funding).
- Overall, equity funding was poorer in the 2007-08 baseline period than in the 2006-07 baseline period in terms of overall money raised, but the number of companies that raised equity was higher in the 2007-08 baseline period than the 2006-07 comparable period.

Other Success Indicators

Employees

- 27 companies or 48% of the respondents indicated an increase in the number of employees. This is lower than the previous year, the 2006-07 baseline tracking (50%) but higher than 2005-06 baseline tracking (35%).
- 16% of the respondents indicated a decrease in the number of employees while 16% also reported no change in the number of their employees.



Mergers & Acquisitions

No mergers or acquisitions were reported in the baseline interval since the culmination of the 2007-08 CAP. However, 3 companies are currently in discussion: [REDACTED].

CAP Impact

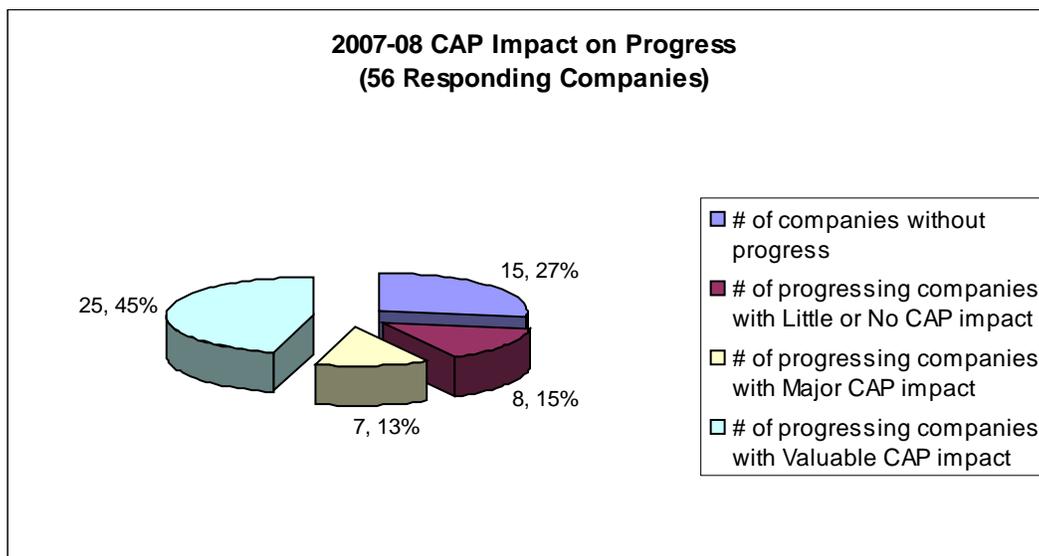
CAP Impact was rated by the companies as either 1) Major, 2) Valuable, 3) Little or No Impact. CAP impact was determined for the following activities that have been addressed earlier in the report.

- 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, 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:

- 7 companies have attributed the CAP with major impact and 25 companies have attributed the CAP with valuable impact. In comparison, only 6 or 9% of the companies participating in the 2006-07 program attributed the CAP with major impact.

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.

“It was a very good experience. It’s our firm belief that we will find a strategic partner using experience obtained within CAP.”

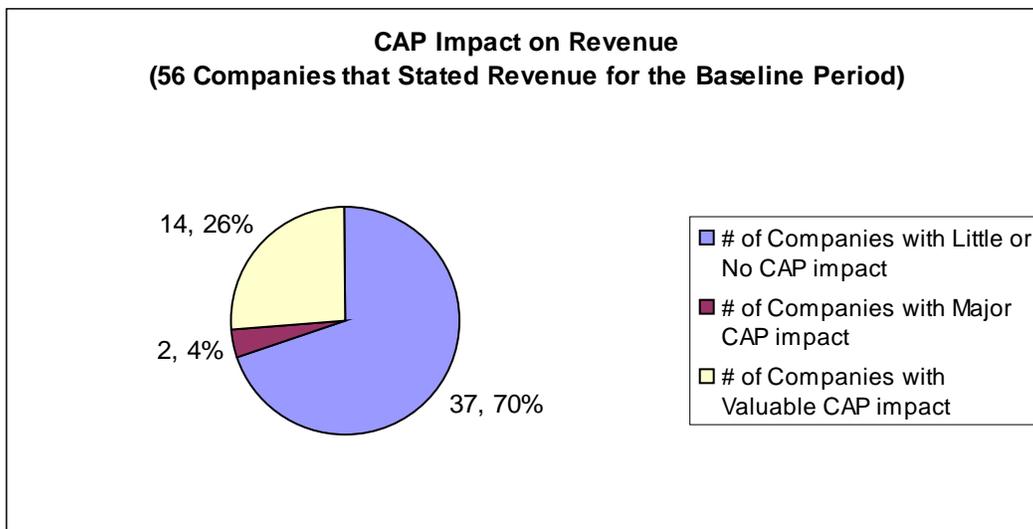
“With the advice of [REDACTED], we have officially partnered with [REDACTED] to incorporate their [REDACTED] instruments into our system. We have signed a collaboration agreement letter in May. Currently the collaboration agreement is only for the duration of the second SBIR Phase II project for product development and validation as the [REDACTED] team is still in the process of formalizing their partnership strategy with commercial entities.”

“The CAP program helped in defining target companies to engage and creating polished presentation material for greater marketing impact.”

“Before CAP [REDACTED] was focused on VC. After first few meetings with our mentor we altered focus to be on partnerships.”

“Initial contacts were made with [REDACTED] prior to starting participation in the CAP program. These contacts are helping with entry into the pre-clinical research market. Our main purpose of participation in the CAP program is to obtain assistance for the next stage of commercialization, i.e. clinical trials and human applications. The assistance provided by the CAP program would be considered a Major Impact for the next stage.”

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:

- 26% of the 56 companies indicated that the NIH-CAP program had a valuable impact on revenue.
- [REDACTED] stated 0 for its revenue, but attributed CAP with full impact on company revenue, stating “The CAP program provided valuable information and assistance on establishing the time or situation when I will go out for venture capital of outside financing. The Mentor was exceptionally helpful.”

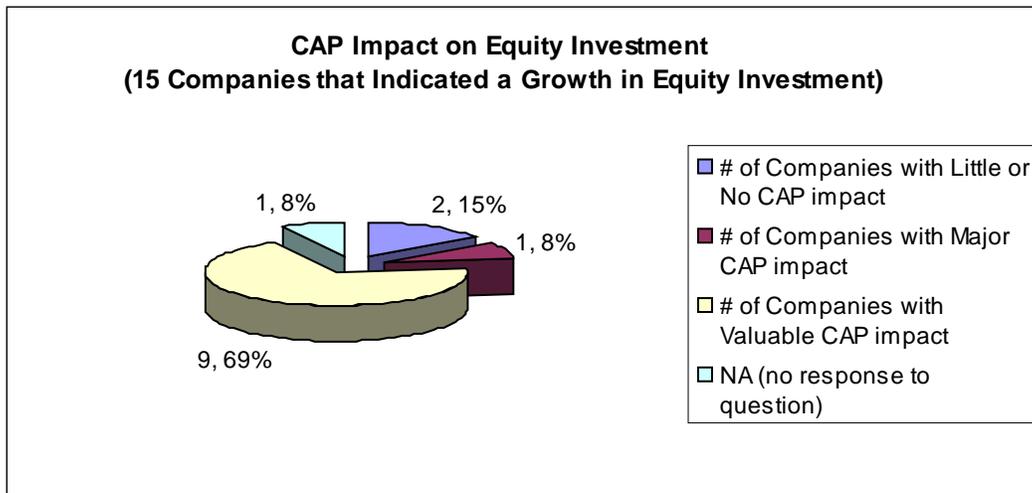
Comments from CAP participants regarding CAP impact on revenue are shown below.

“CAP program is likely to have a significant impact on future revenues as a result of the business planning performed during the program!”

“We are definitely better prepared for our ability to retain existing customers and expand to new customer base with the help of CAP activities. [REDACTED] advices have significantly improved our business strategies and prospects.”

“While revenue to [REDACTED] has not been directly a result of CAP-specific activity, the overall impact that the CAP program has had in prioritization of activities and allocation of resources has been valuable.”

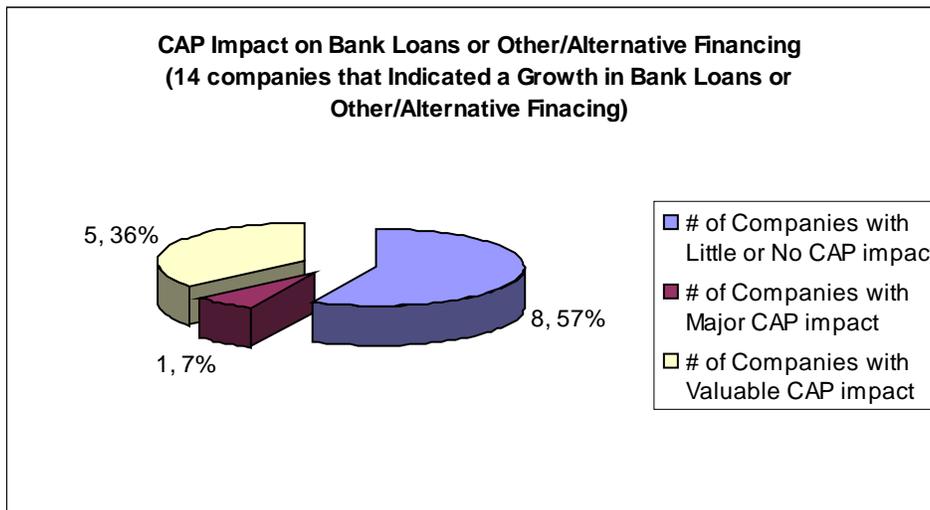
Equity Funding, Bank Loans and Other/Alternative Financing



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

Key observations:

- 69% of the 15 companies that indicated a growth in equity investment attributed the CAP with valuable impact.



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

Key Observations:

- 36% of the 14 companies that indicated funding via bank loans and other/alternative financing attributed the CAP with valuable impact.

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

“Business planning process performed in conjunctions with CAP program valuable to fundraising efforts.”

“Discussions with CAP recommended holding off raising additional capital from VC at that stage. This decision has allowed us to continue as a [redacted] and [redacted] company while maintaining an interested partner and allowing [redacted] to pursue government grant funding.”

“We have not yet reached the point to start meaningful negotiations concerning investment. However, CAP program has provided valuable contacts that would be helpful in seeking investment. We expect this to have a Major Impact in the future.”

“The CAP program has been extremely valuable in honing the presentation and helping us to focus on the implications of various avenues of financing for the company. We have made several presentations and received very positive feedback. Several potential investors have asked for more information.”

Summary

Overall, the 2007-08 baseline results indicate (compared to previous years), a poorer 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 lower in the 2007-08 baseline period than the 2006-07 baseline period. Strategic investment was the largest source of funding in 2007-08, as opposed to VC funding for the companies in the 2006-07 baseline period and the 2005-06 baseline period as well. Still, a larger portion of responding companies is seeking partnerships over financing. This is expected, for despite improvements in the VC climate, obtaining early stage funds still remains a challenge.

With regards to CAP impact, impact on both revenue and equity are 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 more likely in latter tracking intervals and 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:

	2007-08 Baseline	2006-07 Baseline
Deals	10	34

	2007-08 Baseline	2006-07 Baseline
New Equity Investment	\$39.5 Million	\$65.5 Million
CAP Impact	67%	32%
Employment Growth	108	66

The first interval progress tracking for the 2007-08 CAP companies will be conducted in April 2009 for the period July 1, 2008- March 31, 2009.

APPENDIX A

NIH-CAP 2007/2008

COMMERCIALIZATION PROGRESS TRACKING FORM- BASELINE

September 1 2007-June 30 2008

PLEASE RETURN BY AUGUST 15, 2008 TO 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. To start, we are looking for your inputs about your commercialization progress from September 1, 2007 until June 30, 2008 to serve as a base. At nine-month intervals (April 2009 and January 2010), you will receive similar forms in order to assess the long-term impact of the CAP. We also 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 September 1, 2007 and June 30, 2008. Please only state numbers and not qualitative data.

Activity	Number of Partnership-related activities in which your company has been engaged between September 1, 2007 and June 30, 2008	Describe Significant Outcomes
Contacts with Partners Count only contacts with whom you had a meaningful conversation with about your mutual interests		
Meetings with Partners Meetings can be face-to-face or by phone/web but should involve exploration of potential deals in some detail.		
Confidential Disclosure Agreements signed CDA (NDA) agreements are generally a pre-requisite for any serious discussion with potential partners.		
Negotiations with Partners At this stage, all parties are interested in the deal and you are exploring various give and take scenarios.		
Initial Proposals and Term Sheets These are proposals of key terms of the deal and serve as the basis for a final agreement.		
Deals 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 September 1, 2007 to June 30, 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 September 1, 2007 to June 30, 2008. Please only state numbers and not qualitative data.

Investor Party	Amount of Equity Investment
Friends and Family	
Angels High net worth individuals; always invest as individuals although may belong to angel organizations.	
Venture Capitalists (VCs) Institutional investors	
Strategic Investors 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 September 1, 2007 to June 30, 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
Bank Loan Financial Institution, include banks and credit unions.	
Other/Alternative Financing (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 (September 1, 2007 – June 30, 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 September 1, 2007 to June 30, 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 September 1, 2007? If yes, please specify the number of employees in September 1, 2007, 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
Number of Employees in September 1, 2007	
Current Number of Employees	

- 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
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	

	Acquisition Information
Additional Details	

THANK YOU ONCE AGAIN FOR YOUR PARTICIPATION IN THE 2007/2008 CAP AND FOR YOUR FEEDBACK. IT WAS AN HONOR TO WORK WITH YOU AND WE WISH YOU THE BEST OF SUCCESS.