

National Science Foundation

WHERE DISCOVERIES BEGIN



Commercialization Strategies in the Small Business Program at NSF

Joseph Hennessey
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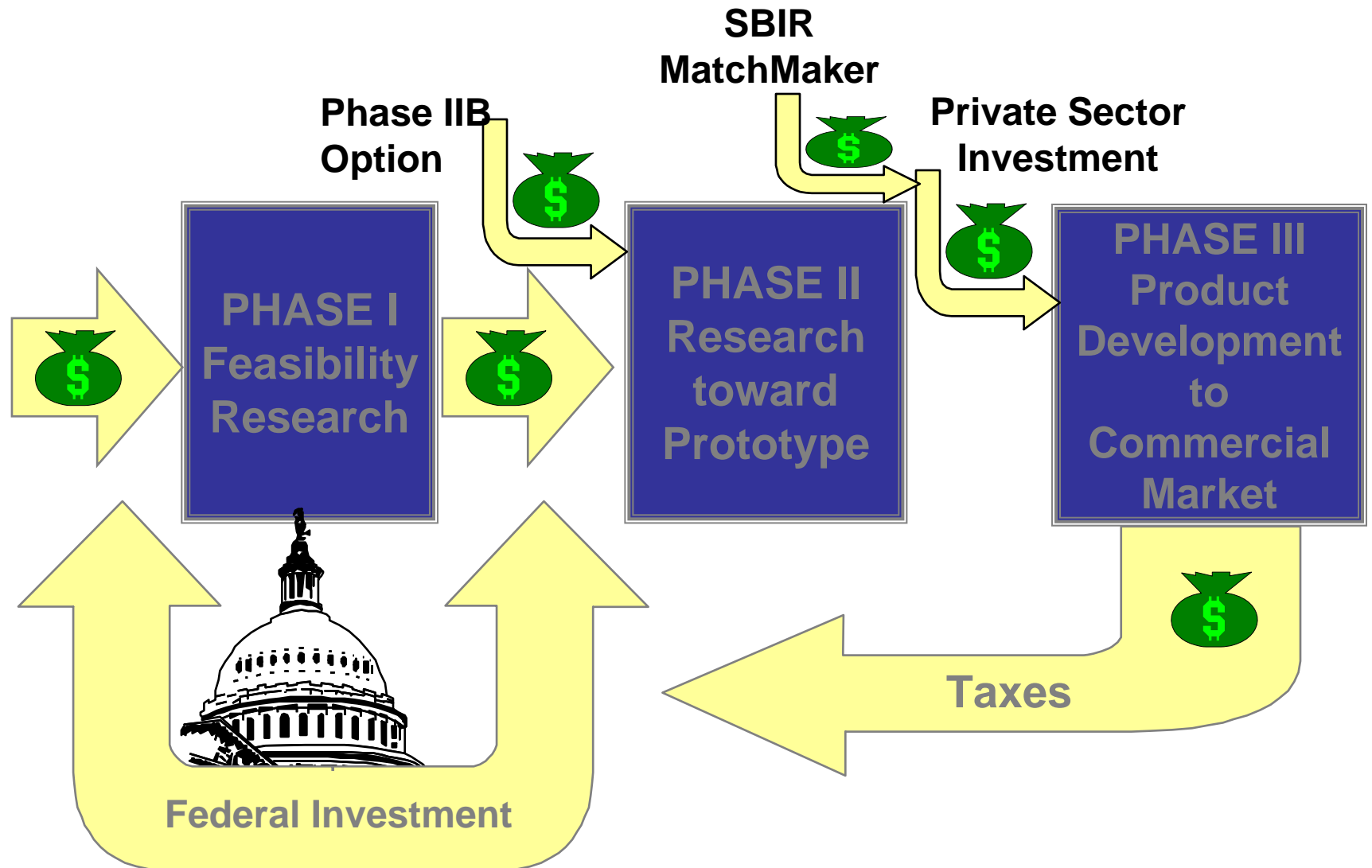
The NSF Small Business Motto

*“Research is the
transformation of money
into knowledge —
Innovation is the
transformation of
knowledge into money!”*

Source: Jeffrey Nichols, 3M

SBIR "INNOVATION" MODEL

Private Sector Investment/Non-SBIR Federal Funds
(before/during/after each Phase!)





SBIR CONCEPTS AT NSF

- NSF is not the Final Customer
- NSF is not buying your product/process or software or your intellectual property
- NSF has broad market driven focused topics with emphasis on national needs
- **NSF has broad market driven technology topics:**
~~you pose the problem, propose the solution,~~
and identify the opportunity
- NSF wants to see you successfully commercialize your high-tech research
- You need investment \$ beyond NSF SBIR



Some General Overall Questions to be Considered

- Is there a need for this technology?
- Have I put together the necessary team for a successful program?
- Who will benefit from this technology?
- Are the tasks and budget reasonable for the program being proposed?
- Who are the customers and who will invest?
- Has ownership of intellectual property been addressed?





Solicitation Topics

- 2 Solicitations released per calendar year for funding in the following fiscal year
- Expect that each Solicitation will offer 1 or more topics that represent:
 - Investment business focused technologies
 - Market driven technologies
 - Special topics in response to National needs
- Keep a watch on the topic offerings of the current solicitation for opportunities most relevant to you



*Market Driven
Investment / Business
Focused
"Core" Solicitation Topics*

- Advanced Materials & Manufacturing (AM)
- Biotechnology (BT)
- Chemical-Based Technologies (CT)
- Electronics (EL)
- Information-Based Technologies (IT)
- Emerging Opportunities (EO)



Current Phase I Solicitation Topics

- June 13, 2007
 - Electronics (EL)
 - Biotechnology (BT)
 - Emerging Opportunities (EO)
 - Information Technology (IT)
 - Advanced Materials, Chemical Technology and Manufacturing
- December 4, 2007
 - Topics to be announced



Company Commercialization History

- How much of your annual revenue is coming from SBIR/STTR awards?
- How much SBIR/STTR funding have you received?
- What is the total revenue resulting from your Phase II projects?



Commercialization Plan

1. Market Need, Expected Outcomes, and Impact
2. The Company
3. The Market, Customer and Competition
4. Intellectual Property (IP)
5. The Financing
6. Revenue Stream



Phase IB Supplement

- Bridge gap between Phase I & Phase II
- Foster partnerships with investors and attract third party funding
- Maximum award \$50,000 based on a third party investment of \$100,000



Phase IIA Minority Partnership

- Consistent with the SBIR Legislation
 - encourage minority participation
- Opportunity to further enhance the science and engineering research underlying the SBIR technology
- Phase IIA is a supplement to an active Phase II grant



Phase IIA Minority Partnership (continued)

- Requires a Phase II grantee to partner with a CREST/RISE grantee:

<http://www.nsf.gov/pubs/2005/nsf05/nsf0520.pdf>

- Budget not to exceed \$150,000
 - SBIR portion <30%
 - CREST/RISE portion >70%



NSF Phase IIB Option



- Supplemental Research to Phase II
- Bridge the gap between Phase II and Phase III
- Third-Party match required
- Third-Party can be Private, State, or Federal



Third-Party Investors Funds Can Come From . . .

- Another company
- Venture capital firm
- Individual “angel” investor
- State Government
- Local Government
- Non-SBIR Federal Government
- Any combination of the above



MatchMaker

Phase III

Goal - Link Early Stage Investors
and Strategic Corporate Partners
with Qualified Phase II Grantees



MatchMaker "Value-Added"

- NSF Program Officers have done "due diligence" on companies
- Because of NSF Program selectivity Corporate Partners will receive targeted matches
- Through MatchMaker Corporate Partners will be locked into Future opportunities



MatchMaker -- SBIR Grantee Criteria

- Definitive plan to protect intellectual property
- Consent to NSF SBIR to provide reference for company
- Phase II proposal ended 5 years ago or less
- Good standing within the SBIR program



MatchMaker Connection

- Mailbox (SBIIRmatch@nsf.gov) was created to allow potential investors and PI's to register
- Program Manager matches their PI's with potential investors and makes the introduction
- MatchMaker Coordinator manages the mailbox and maintains the database



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SBIR/STTR Home Page

<http://www.nsf.gov/eng/iip/sbir/>



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Questions??



Phase IIB Proposals are Reviewed in-House

- Submission must be within original 24 month award period
- Reviewed by at least two NSF Program Officers
- Two Criteria
- Award recommendations within 90 days from the two closing dates of September 1, 2006 and March 1, 2007
- Minimum \$100,000 total Third-Party investment (s)



Phase IIB Information

- NSF will match 50% of the funds received
- Overall total (Phase II & Phase IIB) cannot exceed **\$1,000,000**
- Payment schedule (50% with the supplemental award, 50% with the submission and approval of 6 month interim report)
- Extends Phase II grant by one (or two) year (s)