



**National SBIR/STTR Conference**  
**Research Triangle Park, North Carolina**  
**May 3, 2007**

**Commercialization Plan:**  
**What to Write, What to Do**

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# Commercialization...

*Writing a well crafted commercialization plan is a good start and necessary for a Phase II submission. But what can you do to begin implementation of your commercialization plan, even before your Phase II is funded?*

■ **What to write**

■ **What to do**



# IMPORTANT REMINDER



A good idea  
is necessary  
but not  
sufficient

# What is the SBIR/STTR Program?

A federal funding mechanism to support small business to:

- Stimulate **technological innovation**



- To develop products with **commercial merit**



# What's the Opportunity?

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**Focus on the  
Problem, not the  
Solution !**



# COMMERCIALIZATION



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Developing the Business of Life Science



# BUSINESS PLAN

## Tell Your Story

- Executive Summary
- Company
- Product
- Market
- Management
- Operations
- Financials



# COMMERCIALIZATION PLAN

- Covers a *SPECIFIC* product or technology
- Defines the commercialization model (i.e. – route to market)
- Identifies milestones and risks related to commercialization of the product or service
- Provides financial information related to the product (i.e. – cost, price, sales projections, margin)





# COMMERCIALIZATION PLAN ELEMENTS

## SBA SBIR Policy Directive

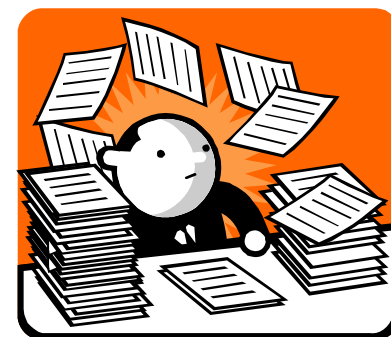
1. Company Information
2. Customer and Competition
3. Market
4. Intellectual Property
5. Financing
6. Assistance and Mentoring



# COMMERCIALIZATION PLAN

## NIH's Proposed Layout

1. Value of SBIR/STTR project
2. Company information
3. Market, Customer, Competition
4. Intellectual Property Protection
5. Finance Plan
6. Production and Marketing Plan
7. Revenue Stream



# COMMERCIALIZATION PLAN ELEMENTS

## 1 - Value of this SBIR/STTR project

- *Lay description* of key technology objectives (features & benefits)
- Need addressed – weakness in state of the art
- What are the potential commercial applications?
- What is the innovation?
- Advantages compared to competing products, technologies or services
- Societal, educational, scientific benefits
- Non-commercial impact
- How does research integrate into Company business plan?



# Product Positioning

1: No need  
Unique Product

2: Big Need  
Many Products

3: No Need  
Many Products

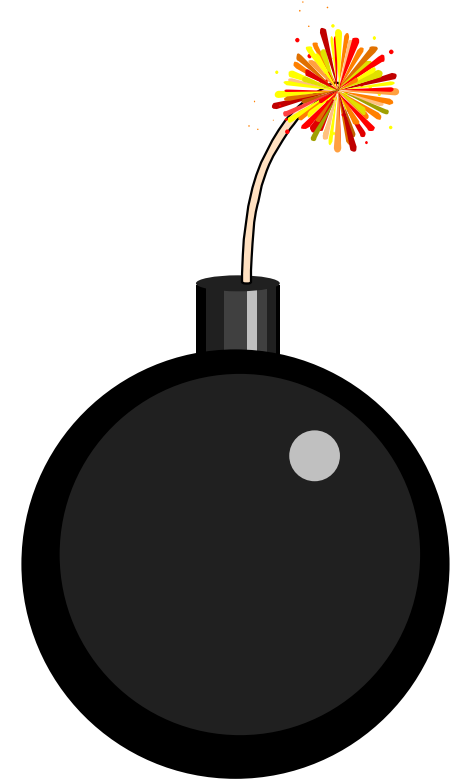
★ Big Need  
Unique Product





# Product

Put your product  
description through  
the “so what” test



# COMMERCIALIZATION PLAN ELEMENTS

## 2. Company information

- Corporate objectives
- Core competencies
- Size
  - ☞ Annual sales
  - ☞ Number, type of employees
- Track record
  - ☞ Identify products with significant sales
  - ☞ History of previous Federal and non-Federal funding
  - ☞ Subsequent commercialization
- Succinct history of the company
- Vision for future
- How will you fill management needs
- *How will you become a successful commercial entity*





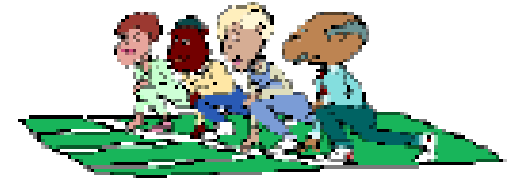
# Management



- **Management Team**
- **Board of Directors**
- **Scientific Advisory Board**
- **Business Advisory Board**
- **Recruiting Plans**
- **Organization chart**

# COMMERCIALIZATION PLAN ELEMENTS

## 3. Market, Customer, Competition



- Target market
- Customer profile
- Positioning (ie – product advantages)
- Hurdles to overcome to gain acceptance (ie – barriers to entry)
- Strategic alliances, partnerships, licensing agreements
  - ☞ To get FDA approval
  - ☞ To market and sell
- Marketing and sales strategy
- Competitive analysis



# What you need to know...

- ➡ **Market size and growth**
- ➡ **Target market**
- ➡ **Market trends**
- ➡ **Customer profile**
- ➡ **Competitors**
- ➡ **Competitive positioning**
- ➡ **Pricing and margin analysis**
- ➡ **Sales and market share projections**
- ➡ **Barriers to entry**



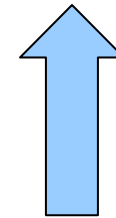
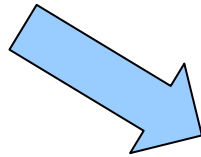


# DO YOUR HOMEWORK

**a.k.a. – MARKET RESEARCH**

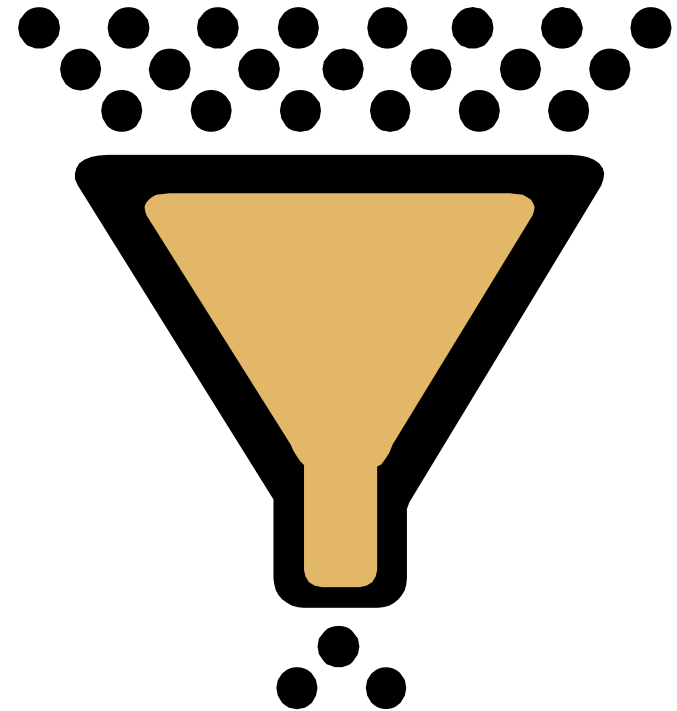
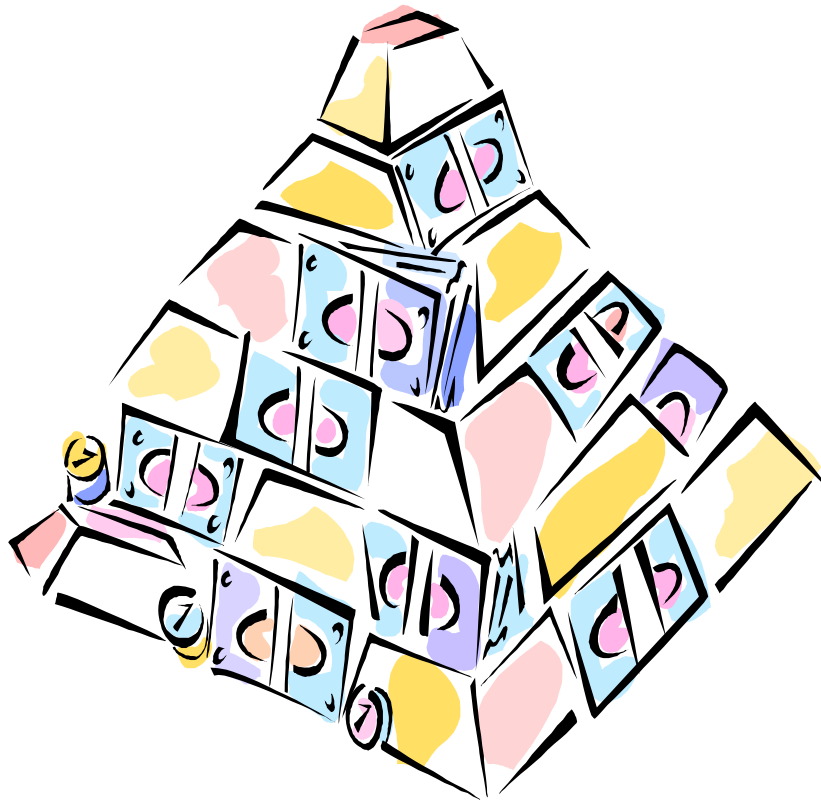


**For the computer savvy**



**For the socially adept**

# Market Analysis



# TARGET MARKET

- What are the potential applications?
- What is their order of priority?
  - ☞ Size of market & market growth?
  - ☞ Ease of entry?
  - ☞ Regulatory hurdles?
  - ☞ Higher margins?
  - ☞ Existing customer relationships?





**To DO:**

# Market Analysis

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**To Verify the Problem...Complete These Steps**

- 1. Test your understanding of the problem**
- 2. Write your description of the problem and its costs**
  - **Talk to more people**
  - **Modify your description as needed**
  - **Ask them what else they need**
- 3. List their needs...Rank them**



## Competitive Analysis: Products



- What are the alternatives?
- How are these products sold now?
- What is their price?
- How big is their market share?
- What is their intellectual property position?



## Competitive Analysis: Companies



- Who are they?
- How large are they?
- Are they developing something new?
- Are they a potential partner?
- How do you intend to compete?

# Pricing 101

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Price  $\neq$  Cost





# Market Analysis

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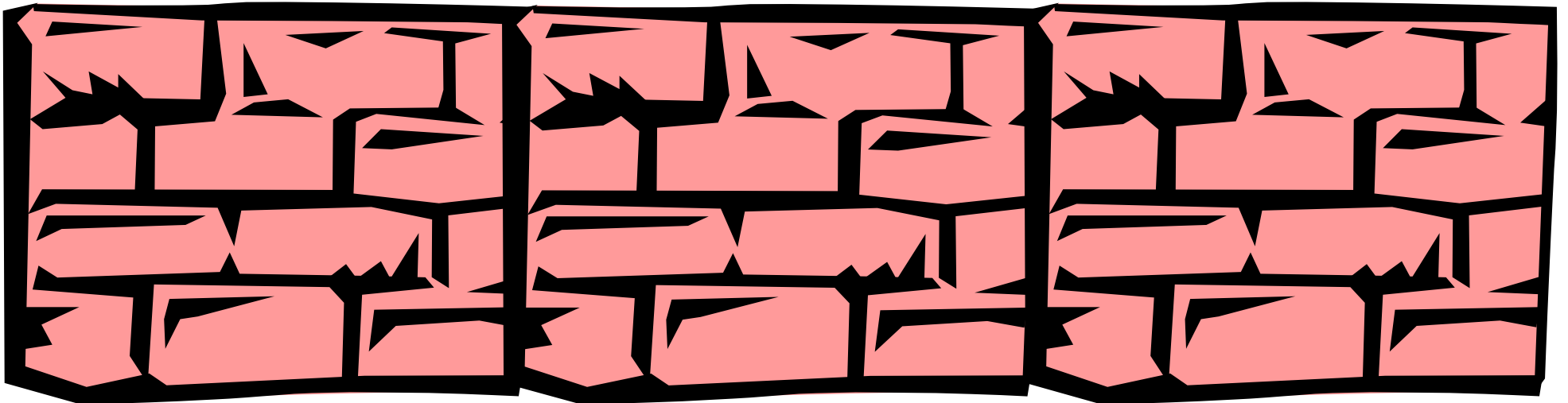
Now for the Solution...

- **What are the customer's current alternatives to solve the problem?**
  - **Include doing nothing**
- **How does your solution compare?**
  - **Performance, convenience, price**
  - **Cost of switching**

# Why a Marketing Plan?

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- **Foundation of Your Business**
- **Primary Communication Tool ...inside & outside the company**
- **Source of company goals, milestones, and measures of progress**



# Developing the Total Marketing Plan

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Strategic

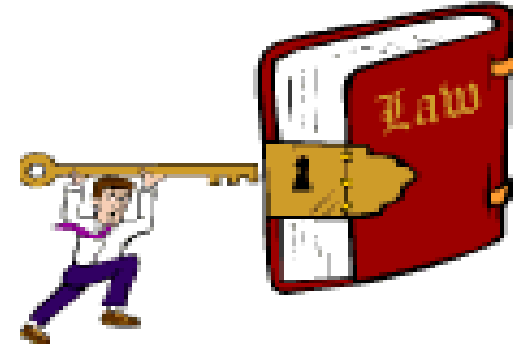
1. Understand your customer
2. Analyze your market & competition
3. Select a market niche

Tactical

4. Develop your marketing message
5. Choose your marketing medium
6. Set marketing and sales goals
7. Develop your marketing budget

# COMMERCIALIZATION PLAN ELEMENTS

## 4. Intellectual Property Protection



- List and describe importance to *THIS* project
- Clearly explain the company's right to use the intellectual property
- Discuss how the IP fits into the broader base of IP in the competitive landscape
- Detail the plan to protect any subsequent IP

# COMMERCIALIZATION PLAN ELEMENTS

## 5. Finance Plan

- How much \$ is necessary to develop the product?
- When will the \$ be required?
- Where will the money come from?



"I just need help getting started.  
A little seed money."

# Funding for Commercialization

\$ **Non-Dilutive**

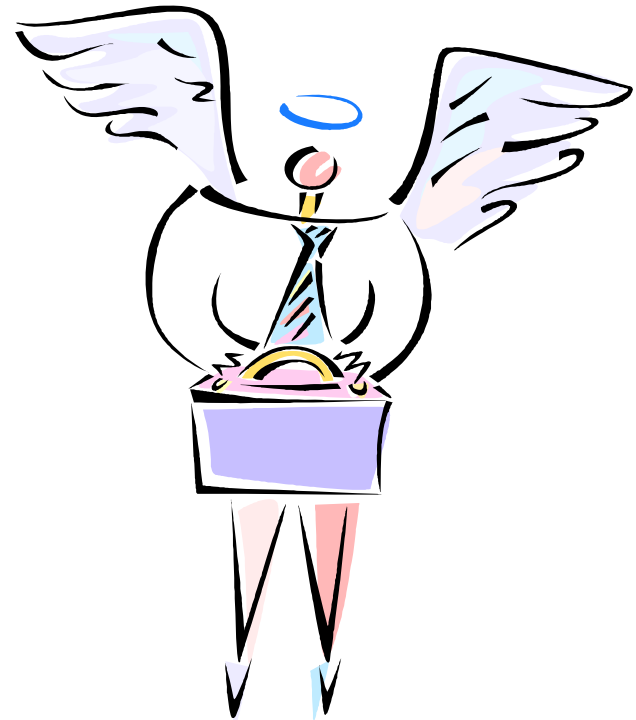
\$ **Equity**

\$ **Debt**



# Equity: Angel Investment

- \$ Typically high net-worth individuals
- \$ Looking for a product, service, company or entrepreneur with whom they can identify
- \$ Mentoring relationship
- \$ “Street Smarts”
- \$ Can move quickly



# Equity: Venture Capital

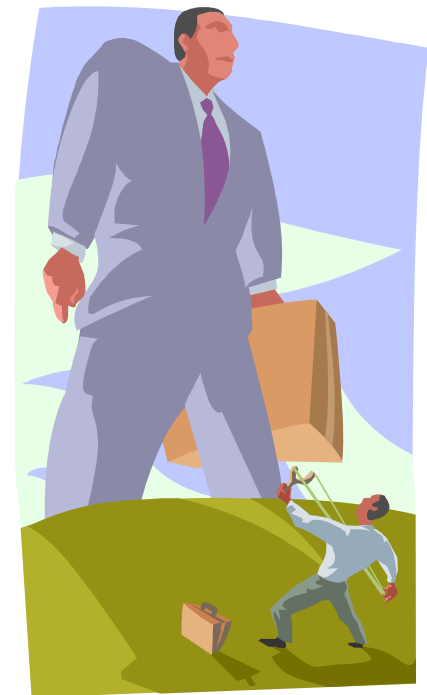
- \$ Often specialize in a business sector
- \$ Many have life-stage preferences
- \$ Often require significant equity positions to invest
- \$ Typically are able to invest more than angels
- \$ Company needs a clearly defined exit strategy





# Corporate Investment

- \$ **Team up with customers, suppliers, even competitors**
- \$ **Lots of possibilities...**
  - **Joint ventures**
  - **Strategic alliances**
  - **Other business combinations**
  - **Technology licensing**
- \$ **May allow you to concentrate on what you know best – your technology!**





# What you'll need for equity financing...

- \$ Extensive knowledge of your market
- \$ How do you plan to make money?
- \$ “Elevator Pitch”
- \$ Clear, concise executive summary
  - only one chance to make a first impression!
- \$ Business Plan





# Investor Presentation\*

1. Title
2. Problem
3. Solution
4. Business Model
5. Underlying Magic
6. Marketing and Sales
7. Competition
8. Team
9. Projections
10. Status and Timeline



\* Guy Kawasaki, April 2005 presentation, Wayne State University

# Debt: Banks

- \$ **Difficult for start-ups to secure debt financing**
- \$ **Risk averse**
- \$ **Collateral Required**
- \$ **May require personal guarantees**
- \$ **Do not require board seats**
- \$ **Do not share in profits**



# Debt: Small Business Administration (SBA)

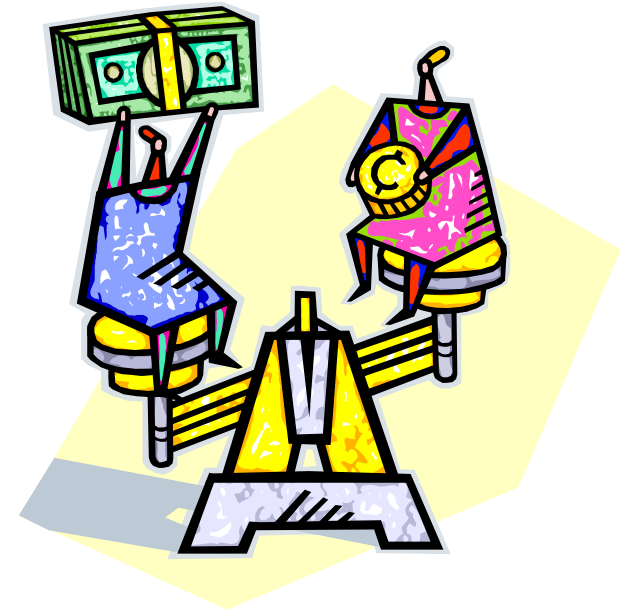
- \$ Provides loan programs to small businesses
- \$ SBA is a guarantor of loans, not a provider
- \$ Works through its network of lenders
- \$ Small Business Investment Companies (SBICs)
- \$ Many other services





# What you'll need for debt financing...

- \$ Summary of the loan request
- \$ Historical balance sheet and income statements
- \$ Projected balance sheet, income statement, and cash flow
- \$ Accounts receivable/payable reports
- \$ Breakdown of inventory
- \$ Summary of collateral values
- \$ Personal financial statements (incl. tax returns)
- \$ Summary of the business and industry



# Other Sources

- \$ **Personal assets**
- \$ **FFF (Friends, family and fools)**
- \$ **Vegas, baby, Vegas!**

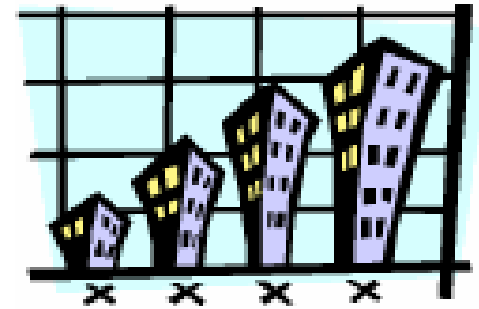


# COMMERCIALIZATION PLAN ELEMENTS

## 6. Production and Marketing Plan

*(Think of this as your “operations” section)*

- Describe how the production of your product/process/service will occur
- Describe the steps you will take to market and sell your product/process/service





# COMMERCIALIZATION PLAN ELEMENTS

## 7. Revenue Stream

- How will you bring in \$\$ to the company upon successful completion of project?
- How will you grow your team to meet revenue expectations?





# Sales Financials

Product sales and margin projections, to include:

Income:

- ➡ Revenue from sale of product
- ➡ Related licensing revenue

Expenses:

- ➡ Cost of Goods
- ➡ Other sales expenses

Bottom line in gross margin dollars and percent



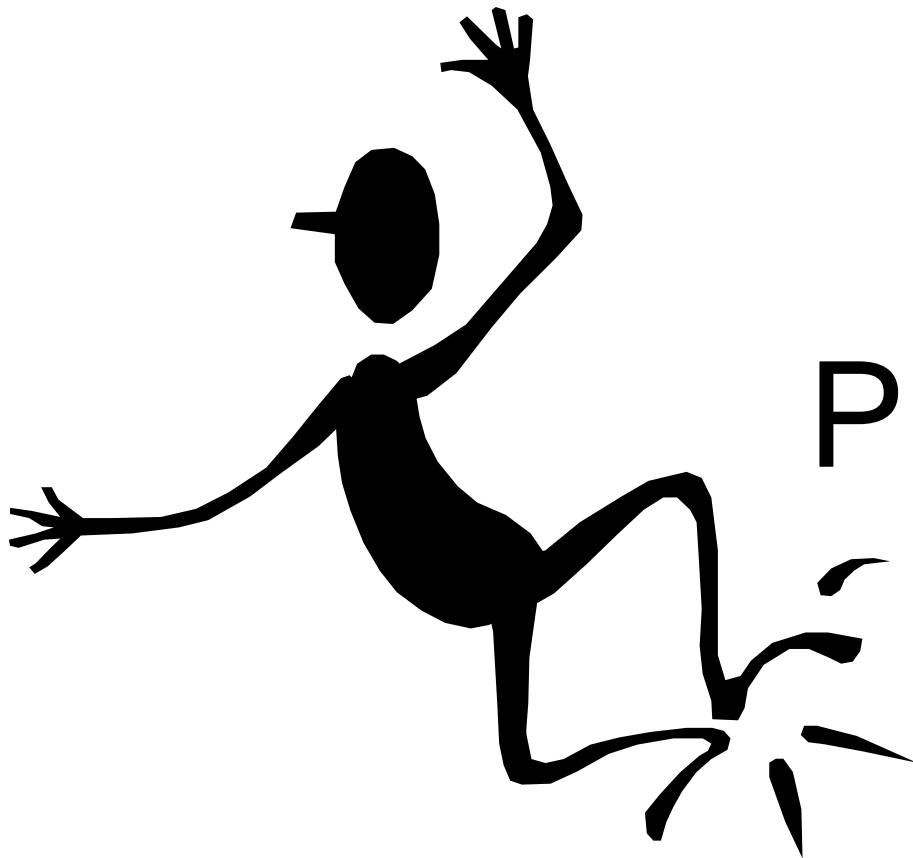
# COMMERCIALIZATION PLAN

## recap

1. Value of SBIR/STTR project
2. Company information
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# COMMERCIALIZATION!



ARE YOU  
PREPARED?

**YES**

# Contact Us:

**Developing  
the Business  
of Life Science**

*"If you don't get to the edge  
you can't see the view."  
-Anonymous*

**BBC News**

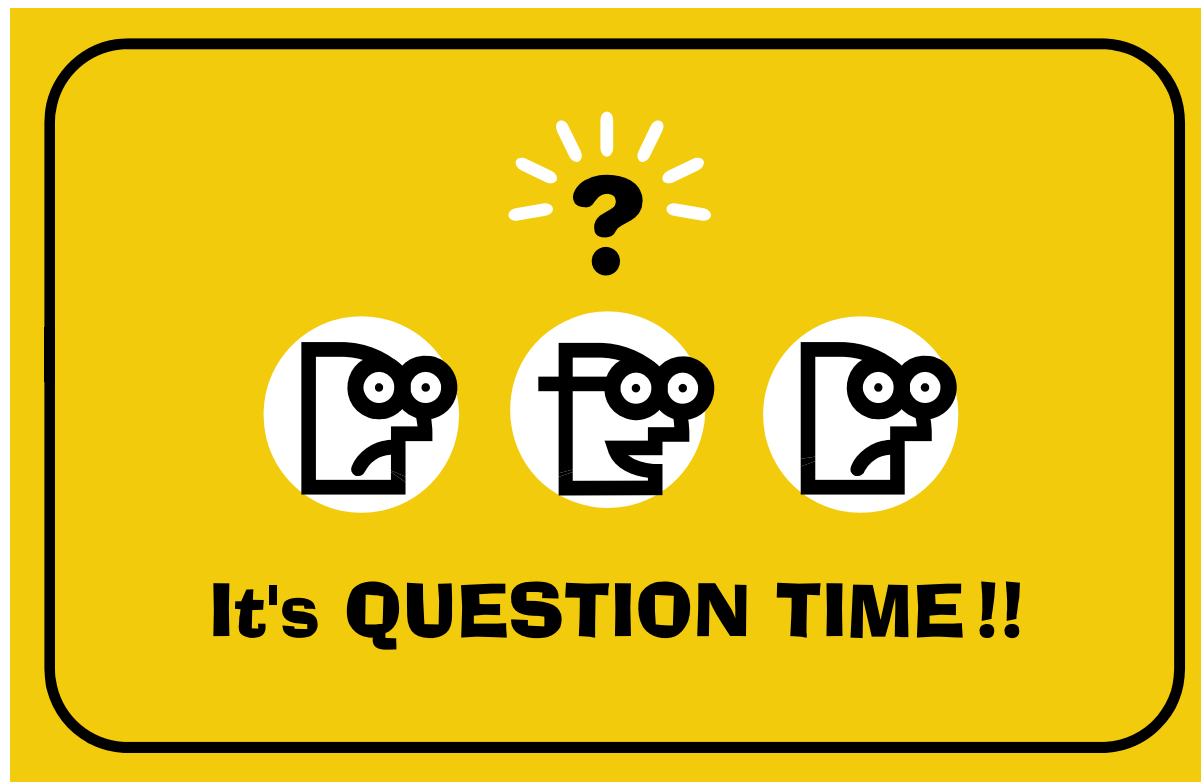
- Expanded training program and schedule

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