



## NSF Webinar

# Partnerships for Innovation Building Innovation Capacity Solicitation: NSF 12-578

Sara B. Nerlove, Ph.D.

Program Director

**Industrial Innovation and Partnerships**

**Engineering Directorate**

National Science Foundation

August 28, 2012

The presentation will be available following the WEBINAR

<http://www.nsf.gov/eng/iip/innovation/BIC.jsp>



## Solicitation: NSF 12-578

**The line will be open for Q&A immediately after the presentation.**

**If you have additional questions after the webinar concludes, please send them via email to: [snerlove@nsf.gov](mailto:snerlove@nsf.gov)**

**The presentation will be available following the WEBINAR  
<http://www.nsf.gov/eng/iip/innovation/BIC.jsp>**



# What is PFI: BIC?

- An early stage partnership based on research discovery findings
- Potential to result in solutions with impact on more than one market
- Primary goals of the partnership are as follows:
  - To build the innovation capacity of the individual participants (both academe and business)
  - To increase the viability of the small business

**Reference I. Introduction in the solicitation for the full description of PFI: BIC**



# Solicitation NSF 12-578

## Key Facts

- LOI required: **September 26, 2012**
- Full proposal: **December 12, 2012**
- Awards: up to \$600K/2-year duration
  - Estimate 11 to 13 awards
- Anticipated funding: \$8,000,000
- Submitter restrictions
  - PI cannot have an active award from the NSF Partnerships for Innovation program
  - PI cannot submit to both NSF 12-578 and NSF 12-571 (Partnerships for Innovation: Accelerating Innovation Research)
  - Institution cannot have a subaward on another proposal submitted to this solicitation (requires checking with SROs)



# Solicitation: NSF 12-578

## Eligibility Requirements

### Two small technology-based businesses

- **Age**
  - One small business must have been founded prior to January 1, 2012
  - Other small businesses must have been founded prior to January 1, 2008
- **Relationship to lead institution**
  - At least one designated small-technology-based business **must not have financial ties through ownerships, licensing, etc.,** to the lead institution
- **Business acumen**
  - At least one team member from each designated small-technology business must have entrepreneurial and business experience



# Solicitation NSF 12-578

## Partnership Requirements

- A minimum partnership is composed of:
  - Academic research team
  - Two small (existing) technology-based businesses
- All partners must have an explicit commitment (stated in the partnership letter)
  - Types of commitments
    - Financial or in-kind
- Other partnering is encouraged; examples are:
  - For profit, not-for-profit, large businesses, additional small businesses (not necessarily technology-based), additional academic institutions\*, consultants, government entities

**Reference: IV. Eligibility Information:  
Additional Eligibility Info**

\*Excluding lead institutions  
planning to submit to NSF 12-578



# Solicitation NSF 12-578

## Project Activities/Tasks

- Flow from a body of knowledge/research platform/set of principles vs. from multiple disparate research discoveries
- For example:
  - Businesses may occupy distinct niches for the solution to the same problem
  - Business may contribute to market valued solutions in distinct application areas



# Solicitation NSF 12-578

## Outcomes

### • **Expected Outcomes: “Takeaways”**

“Takeaways” are defined as capabilities, competencies, or more tangible items that one can take possession of and can move forward with—contrasts with the more passive concept of “benefits”

- **Businesses:** “Takeaways” with potential to help them thrive
- **Academe-Faculty:** “Takeaways” in increased agility in adapting their research to market-valued solutions
- **Academe-Students:** “Takeaways” from exposure to, and participation in, the process of building innovation capacity which occurs in Building Innovation Capacity Projects.



# Solicitation: NSF 12-578

## Cooperative Research Agreement/s (CRA/s)

- CRA/s for this project:
  - Between lead institution and small technology-based business partners, as well as any other partners for which a CRA is relevant.
  - Provide one signed document that can cover/include all agreements or provide multiple signed documents
  - Distinguish CRAs from Cooperative Agreements (CAs) referred to in Section VII. B. of Solicitation

**Think ahead, eliminate surprises, and foster lasting, amicable relationships**



# Solicitation: NSF 12-578

## Cooperative Research Agreement/s CRA/s (Cont)

- Timing
  - Draft these early or, at least, think these through early — because “provided at the time of award” means when the program officer is seriously contemplating an award recommendation (i.e., within days or weeks of the peer review panel meeting)
  - Without completed CRA/s (with copies to NSF), there can be **no award**
  - CRA/s will need to be submitted to NSF in a timely manner upon request, in order for a recommended award to move through the internal review process
  - Know about fees (if any), review time for approval, etc.



# Solicitation: NSF 12-578

## Some Highlights for Discussion

- Need for preliminary data
  - These early stage projects may need to seek a balance between finding the answers to significant questions, removing bottlenecks, and solving thorny problems (such as those relating e.g., to the temperature, the ingredients (amounts , order of combining, concerns for interactions) needed to make the “soup”); and having obtained enough preliminary data to be convincing that the direction has potential
- Other additional review criteria
  - Read them – the peer-review panelists will
- Final Report requirements
  - Read them – gives you insight into where you are headed



# Solicitation: NSF 12-578

## Some Highlights for Discussion (Cont)

- Letter of Intent (LOI) - Concerns have been expressed about character limits; these are standard and not malleable; however, the space available under “Other Comments” can be used to include additional important data that does not fit elsewhere.

**Reference: V. Proposal Preparation and Submission Instructions**  
**A. Proposal Preparation Instructions**  
**Letters of Intent (required)**



# Solicitation: NSF 12-578

## Reviewer Suggestions

- Annotated list (for annotations, e.g., see the key words you plan to provide in your project summary) of suggested reviewers with full contact information.
  - If submitted prior to proposal submission, reference LOI number and send by email to [snerlove@nsf.gov](mailto:snerlove@nsf.gov)



# Solicitation: NSF 12-578

**Questions?**

Questions may also be sent via email to:  
[snerlove@nsf.gov](mailto:snerlove@nsf.gov)

The presentation will be available following the WEBINAR  
<http://www.nsf.gov/eng/iip/innovation/BIC.jsp>



Solicitation: NSF 12-578

# **ADDITIONAL INFORMATION**



# Solicitation: NSF 12-578

## Some Highlights for Discussion (Cont)

- Budget justification
  - Line-by-line explanation of the budget items on the cumulative budget page
  - If any of those items have subcategories, break out these items and show total corresponding to total line item
  - For all consultants whether from designated small-technology businesses or not, provide a letter describing what they will be doing, daily rate, and time available; if from partners, this information can be included as part of the partner letter
- Time commitment: PI & Co-PIs
  - All listed should have a time-commitment whether receiving grant funds or not (describe in budget justification)
  - PI is the intellectual leader of project going well beyond supervising students; carefully consider what is an appropriate time commitment
  - Be careful of over-commitment



# Solicitation: NSF 12-578

## Some Highlights for Discussion (Cont)

- Bio-sketches for business partners
  - Not a Co-PI (more common)
    - If a business partner is not a Co-PI, provide his/her bio-sketch along with the Partnership Letter to be included in Supplementary Documents
  - Co-PI
    - If a business partner is also a Co-PI, provide his/her bio along with those of the PI and Co-PI bios in the FastLane module (format can be adjusted to be relevant for individuals in businesses)
    - Cross-reference in the partnership letter that the bio-sketch for that individual is co-located with other Co-PIs.



# PFI: Building Innovation Capacity

Focus of Collaboration is on a Set of Existing Discovery Research Findings

Academic Institution

Partners

Expected Outcomes

Research Leadership:  
Faculty & Staff

Students

Partnership

Does the partnership provide an opportunity-to translate existing discovery research, moving it to potential market

Does the dual collaboration, the "handshake" of the partnership facilitate mutual learning and growth

Does the partnership focus on work of potential importance to the US economy or other important national and/or global problems?

Core Collaboration:  
2 Small Businesses (Required)  
+  
Others: e.g., more Small, Large, Non-Profit Businesses

Broader Context

Activities:  
Movement of existing research discoveries to potential market-valued solutions of significant economic and/or social importance

Understanding of how the nature and composition of the partnership affects collaborative progress

Takeaways for Academe & Business: for businesses change resulting in increased sustainability; for all individual partners & students: increased agility in melding science and engineering excellence with real-world constraints