CONFERENCE & HOTEL INFORMATION

Attendance at the entire two-day workshop is a mandatory condition of your NSF SBIR Phase I award. Participation in the Commercialization Assistance Planning programs (Dawnbreaker or Larta Institute) is optional but strongly encouraged.

As a courtesy to other attendees, please switch off – or turn to vibrate – all cellular phones during all sessions. Please arrive on time for all sessions. For general sessions, please fill the seats in the front of the ballroom as you arrive.

Registration
Attendees at the Fall 2011 NSF SBIR Phase I Grantee Workshop must check in at the Conference Registration Desk in the Regency ABCD Foyer to pick up your badge and other conference materials during the following hours:

Registration Hours

Tuesday, September 27	5:00 p.m. – 8:00 p.m.
Wednesday, September 28	7:00 a.m. – 6:00 p.m.
Thursday, September 29	7:30 a.m. – 5:00 p.m.

The Registration Desk will remain open throughout this event so that EDJ Associates, Inc. staff are readily accessible and available to answer questions. Late and additional arrivals are welcome to pick up their materials during these hours. However, it is expected that the Principal Investigator or mandatory attendee will check in by 8:30 a.m. on Wednesday, September 28 for the first general session.

If you did not pay the $200 per attendee registration fee in advance, you are required to provide payment onsite at the Registration Desk in Regency ABCD Foyer during the hours listed above. Cash, checks (made payable to EDJ Associates, Inc.) and credit cards will be accepted.

Your name badge is your admission to all sessions and meals, and must be worn at all times. If you misplace your badge, you will be required to show a photo ID at the registration desk to obtain a new badge. Please carry a photo ID with you at all times.

Hotel Information
Hyatt Regency Crystal City
2799 Jefferson Davis Highway
Arlington, VA 22202
Phone: (703) 418-1234
Fax: (703) 418-1289

Airport Shuttle
The hotel offers courtesy shuttle service to/from Reagan National Airport (DCA) and to the Crystal City Metro (Blue/Yellow Lines) seven days a week from 5:00 am – 12:00 am. The hotel shuttle picks up guests from the front driveway every 20 min (at the top of the hour and 20 minutes and 40 minutes past the hour). For guests in the area who require transportation back to hotel, call 1-703-418-1234. The hotel vans are blue with white lettering saying Hyatt Regency Crystal City. Arriving guests should call the hotel directly for van pick-up from the courtesy phone in baggage claim area.

Parking
- Valet parking fee
    - 0-2 Hours = $10
    - 2-4 Hours = $15
    - 4-6 Hours = $18
    - 6 + Hours = $25
- Overnight: $25

Concierge
The Hyatt Regency Crystal City is pleased to offer various amenities through the concierge desk located in the lobby to make your stay as pleasant as possible.

Meeting Locations in Hotel
The Registration Desk and all sessions will be held on the Ballroom level. From the lobby, take the escalators or elevators down two levels. Both lunches will take place in Tidewater, on the 2nd floor of the hotel, up one level from the Lobby by escalator or elevator.

WORKSHOP AGENDA

Tuesday, September 27, 2011

5:00 PM – 8:00 PM
Regency ABCD Foyer

Registration Area Open
Please check in at Registration on Tuesday evening to pick up your badge and workshop materials and avoid the lines on Wednesday morning.

Wednesday, September 28, 2011

7:00 AM – 8:30 AM
Regency ABCD Foyer

Continental Breakfast Available

7:00 AM – 6:00 PM
Regency ABCD Foyer

Registration/Information Desk Open

General Session: "Scaling the Next Mountain"

8:30 AM – 9:15 AM
Regency ABCD Ballroom

Entrepreneurial Lessons Learned in Scaling a Venture-Backed Company from an Idea into a Commercial Product
Dax Kepshire, SustainX, Inc

9:15 AM – 10:00 AM
Regency ABCD Ballroom

Lessons Learned in a Venture-Backed Startup
Jim Lucchese, Echo Nest, Corp.

10:00 AM – 10:15 AM
Regency ABCD Foyer

Coffee Break

10:15 AM – 11:00 AM
Regency ABCD Ballroom

Startup Survival: The Power of Strategic Options
Kurt Jacobus, MedShape Solutions

11:00 AM – 11:45 AM
Regency ABCD Ballroom

United States Patent and Trademark Office: Basics for Small Business
Azam Khan, US Patent Office

11:45 AM – 12:30 PM
Regency ABCD Ballroom

Intellectual Property: Creation, Strategies and Tips for Startups
Paul Sharer, Jones Day

12:30 PM – 1:30 PM **Luncheon**
Tidewater (2nd Floor)

General Session: "Everything You Need to Know to Get to Phase II" (Part 1)

1:30 PM – 2:00 PM **Welcoming Remarks and Introduction to IIP**
Regency ABCD Ballroom
Kesh Narayanan, Deputy Assistant Director, ENG/OAD
Joseph Hennessey, Senior Advisor, SBIR/STTR
Errol Arkilic, Program Director, I-Corps

2:00 PM – 2:15 PM **NSF Program Director Introductions**
Regency ABCD Ballroom

2:15 PM – 2:30 PM **Workshop Overview & How to Get Paid**
Regency ABCD Ballroom
Amanda Morris, Program Manager, SBIR/STTR and Partnership Programs, EDJ Associates, Inc.

2:30 PM – 3:00 PM **OLPA Overview**
Regency ABCD Ballroom
Josh Chamot, Public Affairs Specialist, Office of Legislative and Public Affairs

3:00 PM – 3:30 PM **OIG Investigations: We're Here to Help!**
Regency ABCD Ballroom
Monte Fisher, Senior Counsel, Office of Inspector General

3:30 PM – 3:45 PM **Coffee Break**
Regency ABCD Foyer

3:45 PM – 4:15 PM **Phase IB Supplement Overview**
Regency ABCD Ballroom
Joseph Hennessey, Senior Advisor, SBIR/STTR Program

4:15 PM – 5:15 PM **Phase II Commercialization Plan**
Regency ABCD Ballroom
Murali Nair, SBIR/STTR Program Director

5:15 PM – 6:00 PM **SBIR Phase II Commercial Review Panel**
Regency ABCD Ballroom
Panel discussion and Q&A with Phase II commercial reviewers
Moderator: Ben Schrag, SBIR/STTR Program Director

6:00 PM – 7:30 PM **Networking Reception**
Regency ABCD Foyer

Thursday, September 29, 2011

7:00 AM – 8:30 AM **Continental Breakfast Available**
Regency ABCD Foyer

7:30 AM – 5:00 PM **Registration/Information Desk Open**
Regency ABCD Foyer

General Session: "Everything You Need to Know to Get to Phase II" (Part 2)

8:30 AM – 9:30 AM *Regency ABCD Ballroom*	**Phase II Proposal & Budget Preparation** *Greg Baxter, SBIR/STTR Program Director* *Bruce McKinnon, Computer Specialist, OIRM/DIS*
9:30 AM – 10:00 AM *Regency ABCD Ballroom*	**Phase II Financial and Budget Reviews** *Willie Mae Powell, Financial Review & Cost Analyst, Division of Institution and Award Support*
10:00 AM –10:15AM *Regency ABCD Foyer*	**Coffee Break**
10:15 AM – 11:00 AM *Regency ABCD Ballroom*	**Phase II Grant Process and Policy Updates** *Jamie French, Team Lead, OPP/ENG Team, Division of Grants and Agreements*
11:00 AM – 12:00 PM	**Cluster Breakout Sessions**
Regency ABCD Ballroom	Biological and Chemical Technologies (BC)
Potomac 3/4	Education Applications (EA)
Potomac 3/4	Electronics, Information and Communication Technologies (EI)
Potomac 1/2	Nanotechnology, Advanced Materials and Manufacturing (NM)
12:00 PM – 1:00 PM *Tidewater (2nd Floor)*	**Luncheon**
1:00 PM – 3:00 PM *Potomac 1/2*	**CAAR Open Session** *Come by and ask questions about the cost analysis financial and budget review process. It is strongly recommended that you view the Accounting Workshop pre-event orientation video (available on the registration website) prior to this Q&A session.*
1:00 PM – 5:00 PM *Regency AB Ballroom*	**NSF One-on-One Meetings** *See schedule for mandatory appointment times*
1:00 PM – 5:00 PM *Potomac 5/6*	**Dawnbreaker One-on-One Meetings** *See schedule for appointment times*
1:00 PM – 5:00 PM *Potomac 3/4*	**Larta Institute One-on-One Meetings** *See schedule for appointment times*
3:00 PM – 3:30 PM *Regency ABCD Foyer*	**Coffee Break**
5:00 PM	**WORKSHOP CONCLUDES**

General Session: "Scaling the Next Mountain"

8:30 AM – 9:15 AM	**Entrepreneurial Lessons Learned in Scaling a Venture Backed Company from an Idea into a Commercial Product** *Dax Kepshire, SustainX, Inc*
9:15 AM – 10:00 AM	**Lessons Learned in a Venture-Backed Startup** *Jim Lucchese, Echo Nest, Corp.*
10:00 AM – 10:15 AM	**Coffee Break**
10:15 AM – 11:00 AM	**Startup Survival: The Power of Strategic Options** *Kurt Jacobus, MedShape Solutions*
11:00 AM – 11:45 AM	**United States Patent and Trademark Office: Basics for Small Business** *Azam Khan, US Patent Office*
11:45 AM – 12:30 PM	**Intellectual Property: Creation, Strategies and Tips for Startups** *Paul Sharer, Jones Day*

ALL PRESENTATIONS FOR THESE SESSIONS WILL BE UPLOADED TO THE EVENT WEBSITE FOLLOWING THE CONCLUSION OF THIS WORKSHOP.

General Session: "Everything You Need to Know to Get to Phase II"

Phase I Final Report – and How do I get paid??

Amanda Morris
SBIR/STTR Support Contract
Program Manager

Phase I Final Report

- **Reports should not exceed 15 pages of technical content.**
- Final Report submission in FastLane ***must include a signed "Cover Page"*** (you can not get paid without it!).
- Upload your Final Report & Cover Page as a 16 page SINGLE .PDF file to FastLane!
- Your Phase I award expires on December 31st and your Final Report is **due in Fastlane by January 15, 2012.**
- **If you receive a Phase IB supplement** – your *Interim Report* is due by January 15th and your *Final Report* is due by July 15, 2012

SBIR/STTR Final Report "Cover Page" is available on the SBIR/STTR website at

http://www.nsf.gov/eng/iip/sbir/forms.jsp

SBIR/STTR PHASE I FINAL REPORT COVER PAGE

NSF Award Number:	Project Title:	
Date:	Period Covered by this Report:	
Company Name:	PI Name:	Email:
Telephone Number:	Fax Number:	
Company Address:		

Please check as appropriate:

Plan to submit Phase II Proposal: [ ] **January** [ ] **July**

[ ] **Report contains Proprietary Information**

Acknowledgment of NSF support and disclaimer:
"This material is based upon work supported by the National Science Foundation under Award Number: _____. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

Certifications:

I certify that the Principal Investigator currently is [ ], is not [ ], "primarily employed" by the grantee organization as defined in the SBIR Solicitation.

I certify that the work under this project has [ ], has not [ ], been submitted for funding to another Federal agency and that it has [ ], has not [ ], been funded under any other Federal grant, contract, or subcontract.

I certify that to the best of my knowledge the work for which payment is hereby requested was performed in accordance with the award terms and conditions and that payment is due and has not been previously requested.

I certify that to the best of my knowledge (1) the statements herein (excluding scientific hypotheses and scientific opinions) are true and complete, and (2) the text and graphics in this report as well as any accompanying publications or other documents, unless otherwise indicated, are the original work of the signatories or individuals working under their supervision. I understand that the willful provision of false information or concealing a material fact in this report or any other communication submitted to NSF is a criminal offense (U.S. Code, Title 18, Section 1001).

Authorized Company Officer Name:_____

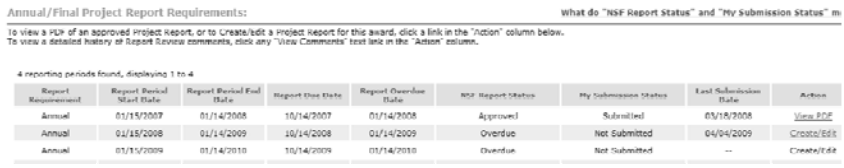
Signature: _____ **Date:**_____

PI Name : _____

P.I. Signature:_____ **Date:**_____

FastLane Reporting Module

- Login as Principal Investigator
- Click “Award & Reporting Functions”
- Click “Project Reports System”
- Select award for which report is due
- Click “Create/Edit” in Action field and then Continue



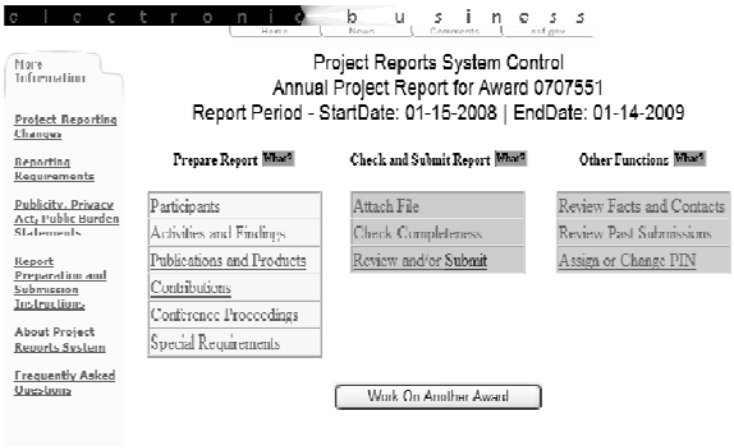
Annual/Final Project Report Requirements: What do "NSF Report Status" and "My Submission Status" m

To view a PDF of an approved Project Report, or to Create/edit a Project Report for this award, click a link in the "Action" column below.
To view a detailed history of Report Review comments, click any "View Comments" text link in the "Action" column.

4 reporting periods found, displaying 1 to 4

Report Requirement	Report Period Start Date	Report Period End Date	Report Due Date	Report Overdue Date	NSF Report Status	My Submission Status	Last Submission Date	Action
Annual	01/15/2007	01/14/2008	10/14/2007	01/14/2008	Approved	Submitted	03/18/2008	View PDF
Annual	01/15/2008	01/14/2009	10/14/2008	01/14/2009	Overdue	Not Submitted	04/04/2009	Create/Edit
Annual	01/15/2009	01/14/2010	10/14/2009	01/14/2010	Overdue	Not Submitted	--	Create/Edit

FastLane Reporting Module



e l e c t r o n i c b u s i n e s s

More Information

Project Reporting Changes

Reporting Requirements

Publicity, Privacy Act, Public Burden Statements

Report Preparation and Submission Instructions

About Project Reports System

Frequently Asked Questions

Project Reports System Control
Annual Project Report for Award 0707551
Report Period - StartDate: 01-15-2008 | EndDate: 01-14-2009

Prepare Report What?
- Participants
- Activities and Findings
- Publications and Products
- Contributions
- Conference Proceedings
- Special Requirements

Check and Submit Report What?
- Attach File
- Check Completeness
- Review and/or Submit

Other Functions What?
- Review Facts and Contacts
- Review Past Submissions
- Assign or Change PIN

Work On Another Award

Phase I Final Report

- Click on "Participants"
  - Name of Individuals
  - Role Played on the project
  - Extent of time put on the project
  - What the person has done on the project
- Click on "Activities and Findings"
  - Upload your technical report by clicking on the "Activities File" button
- Click on Publications and Products (if applicable)
- Click on Contributions (if applicable)

How Do I Get Paid??

Your final payment will be released when the following tasks are accomplished:

- Your Final Technical Report (no more than 15 pages) and signed SBIR Cover Page is uploaded to FastLane as a *single* PDF document
- Your Program Director approves the report and sends a payment request to Division of Financial Management
- Payment typically takes 15-30 days <u>AFTER the Program Director approves the report and requests payment</u>

Phase I Report in Phase II Proposal

You must ALSO upload your Phase I Report into your Phase II proposal in Fastlane.

- **Upload to the Reporting Module to initiate payments and store the report in the Phase I award file.**
- **Upload to the Phase II Proposal (Supplementary Documents) to make it visible to the reviewers.**
- **Fastlane does not "magically" move the report from the Reporting Module into your Phase II proposal!!**

What is News? Communicating with - and through – the news media

Josh Chamot

NSF Media Officer for

Engineering Directorate

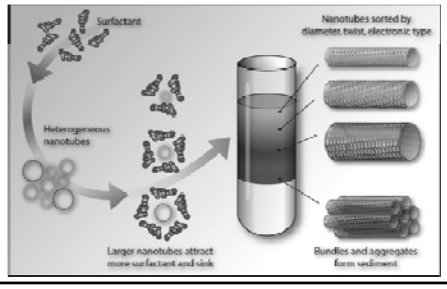
Three key points . . .

1. **Know your audience**
2. **Outreach expands your audience**
3. **Interaction is not a crisis (you are not alone)**

Three key points . . .

Know your audience

- *Audience includes reporters, Hill staff, the taxpaying public who funded your work, etc.*
- *The better you understand your audience, the more likely they will understand you*
- *The more you respect your audience, the more they will respect you (and vice versa)*



Three key points . . .

Outreach expands your audience

- *A larger audience equates to greater support for your research and the benefits of your work*

Nanoscience Program, University of Arkansas

Three key points . . .

Outreach expands your audience

- *An interview is a human interaction, the same rules apply: be confident, honest, respectful and open and the experience will go far better than if you are nervous, guarded, disrespectful and defensive*

Roald Hoffmann, Cornell University

Three key points . . .

Outreach expands your audience

- *An interviewer is coming to you for information; always try to provide them with something*

Three key points . . .

Outreach expands your audience

- *When a news story quotes you or your colleague, the reporter—and more likely the editor—may unintentionally misrepresent the facts . . . ironically, the "cure" is to have more interviews with more reporters*

Three key points . . .

You are not alone

- *Work with NSF*
- *Work with your university media office*

Three key points . . .

You are not alone

- *Work with your colleagues to help them understand that the future of your research depends on effective public communication*

Conversations with "The Media"

So how much smarter are you, really?

"Modal Mineralogy of the H-group Chondrites: Progressive Effects of Metamorphism"

The modal mineralogy of ordinary chondrites is notoriously difficult to determine through optical point counts, and most researchers have relied upon CIPW normative mineralogy calculations to establish mineralogic trends. Our research uses electron microprobe point counts (up to 528,000 per thin section) to compare CIPW norms with ordinary chondrite modes. From this information, we will compare modal petrologic trends with normative trends.

DO NOT USE JARGON

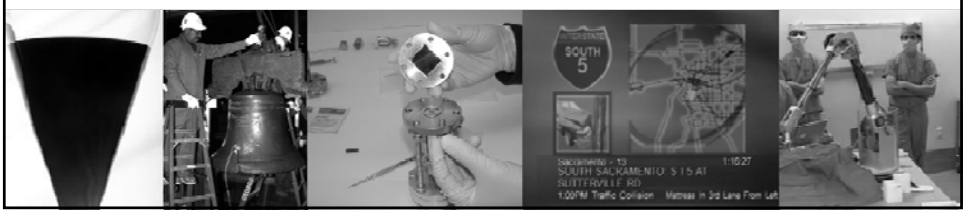
The media will respond to news stories that originate from a variety of sources:

Events with <u>immediate</u> societal impact (ex., the "cold fusion" announcement)

Perceived, actual, and manufactured trends

Publication in major journals (ex., *Science* and *Nature*)

Stories with human interest, such as those involving public figures or "overcoming adversity" – although these are hard to pitch



Reporters do not all come from one background

Reporters may be trained in journalism only, in science or engineering, or in some combination of these fields.

<u>DO NOT USE JARGON</u>

Courtesy Georgia Tech Center for Low Cost Electronics Packaging Research; photo by Stanley F. Leary

Reporters do not all come from one background

Some reporters have a firm grasp of science and engineering, others may not – do not underestimate their ability to process complex information.

That said, err on the side of ***simplicity*** and . . .

DO NOT USE JARGON

Courtesy Georgia Tech Center for Low Cost Electronics Packaging Research; photo by Stanley F. Leary

We can often tell you if a reporter or producer is biased, has an agenda, or has a questionable reporting record.

FOX NEWS channel

Online NewsHour

abc NEWS.com

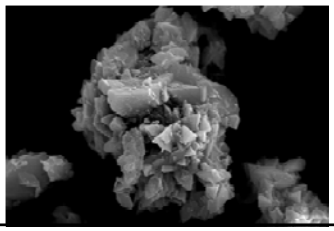
CNN.com

the ONION

CNBC

NSF requires grantees to acknowledge NSF funding when interviewed by the media.

If you are prepared for responding to the media, you will be prepared when a reporter calls with no warning.



Article 19, "Publications

a. Acknowledgment of Support.

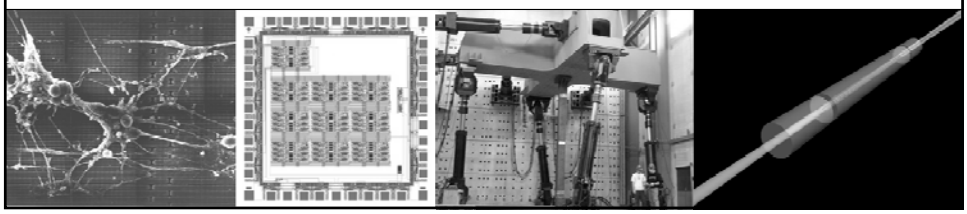
2. NSF support must also be orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

Working with NSF Media Relations

Provide timely information – well in advance of journal publication dates or meetings.

Be available to speak to the media

When you are queried, let us know – we can track media interest



OLPA both works with the commercial broadcast media and produces video segments of its own . . .

On-camera interview preparation

Video News Releases

“B-Roll”

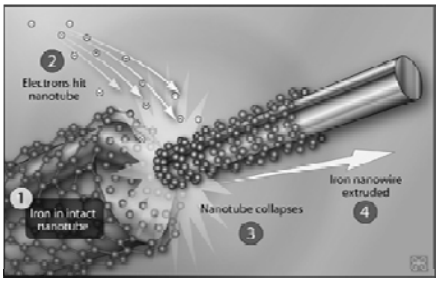
Archival Footage

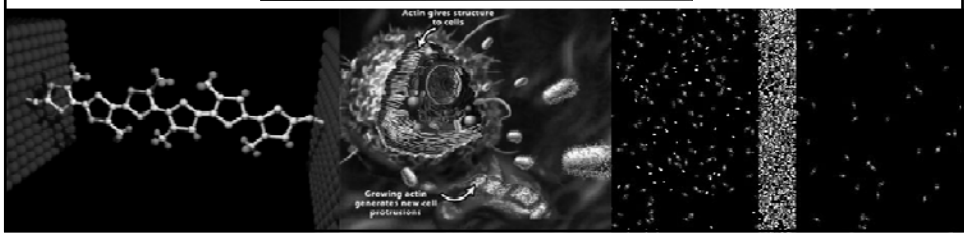
Animations

Illustrations

We need photos
(Preferred print resolution: 5” X 7” and 300 dpi or greater)

We need other graphic elements
(OLPA can create these with your help)





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National Science Foundation
WHERE DISCOVERIES BEGIN

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Chemistry & Materials
Computing
Earth & Environment
Education
Engineering

Press Release 04-002

Chemists Crack Secrets of Nature's Super Glue

Mussel powered proteins stick to Teflon, even under water

Common blue mussel (*Mytilus edulis*) hangs tough.
Credit and Larger Version

January 12, 2004

ARLINGTON, VA.—Researchers have discovered that iron in seawater is the key binding agent in the super-strong glues of the common blue mussel, *Mytilus edulis*. This is the first time researchers have determined that a metal such as iron is critical to forming an amorphous, biological material.

Common blue mussel (*Mytilus edulis*) from coastal Maine extends its foot for the camera.
Credit and Larger Version

The small colony of common blue mussels adhered to this glass plate.
Credit and Larger Version

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Computing
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Education

Media Advisory 06-027

Panel Set to Present Astronomy Program Recommendations to NSF

Senior review committee to answer reporter questions at 2:00 p.m. on Nov. 3

October 26, 2006

For decades, the National Science Foundation (NSF) has supported cutting edge astronomy research that has transformed our understanding of the universe. To ensure that NSF's astronomy programs continue to push the edge of scientific discovery, NSF charged a special committee to examine how the division's limited resources can be applied to future needs and to recommend steps to meet this goal. The group will present its recommendations to the Mathematics and Physical Sciences Advisory Committee on Friday, Nov. 3, 2006, at NSF headquarters.

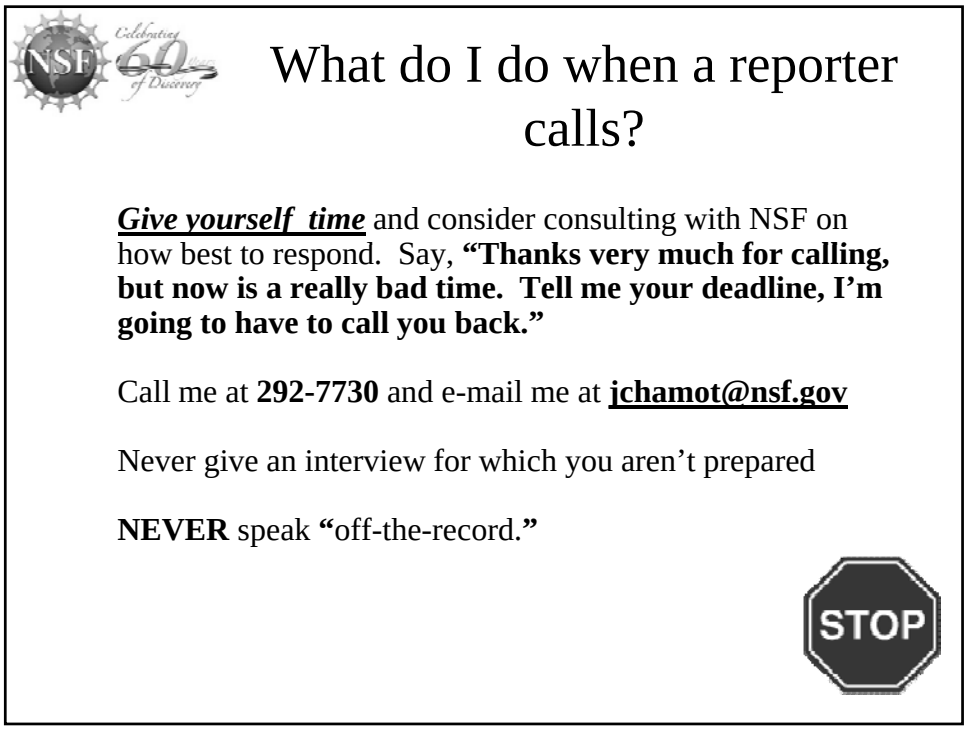
The recommendations are based on a year of town hall meetings, community visits and consultations.

What: Senior Review Committee Recommendations for NSF's Astronomy Programs
Presentation and reporter call-in during Mathematics and Physical Sciences Advisory Committee.

When: Presentation at 9:00 a.m. Reporter call-in at 2:00 p.m.
Call-in details: Start time: 2:00 p.m. sharp
USA toll-free number: [illegible]
International callers may use toll number:
+1-212-[illegible]-1616
Passcode (STELLAR) and leader name (Patrick Oliver) are required to enter call

Who: Roger Blandford, Stanford Linear Accelerator Center and Kavli Institute of Particle Astrophysics and Cosmology
NSF Astronomy Division Director Wayne Van Citters

Where: NSB Boardroom (Room 1235)



What do I do when a reporter calls?

Give yourself time and consider consulting with NSF on how best to respond. Say, **"Thanks very much for calling, but now is a really bad time. Tell me your deadline, I'm going to have to call you back."**

Call me at **292-7730** and e-mail me at **jchamot@nsf.gov**

Never give an interview for which you aren't prepared

NEVER speak **"**off-the-record.**"**

The “Off the Record” Myth

There is no universally accepted definition of what “off the record” means. It means what the **reporter** thinks it means

Assume that anything and everything you say to a reporter is ON the record

You cannot “take back” something that you already have said in an interview

Never say anything you would not wish to see in *The Washington Post*

The Bottom line: Never speak “off-the-record.”

Remember:
An interview is strictly business

While keeping it friendly, the interview is not a good venue for chit chat.

Conflict is best reserved for later. When in an interview, use logical, prepared statements – not emotional arguments, lectures, or other forms of debating or cajoling.

And finally, deadlines are tight and reporters need all the time they can get to prepare an accurate story. Be brief.

Some Common Concerns About Media Interaction . . .

I'll be misquoted
I'll be taken out of context
I'll look stupid ("peer sneer")
I'll mistakenly contradict agency policies in print
I'll be hounded by the press

Some Common Concerns About Media Interaction . . .

I'll be misquoted / You can reply by email, or request that reporter fact-checks your quotes (before you submit to the interview)

I'll be taken out of context / see above

I'll look stupid ("peer sneer") / If subject matter is outside your field of expertise, re-direct the reporter to another source (if the fear is being viewed as "the best engineer on television," recognize peer jealousy for what it is and move on – communicating complex processes in a way the public will understand is a skill, not acting)

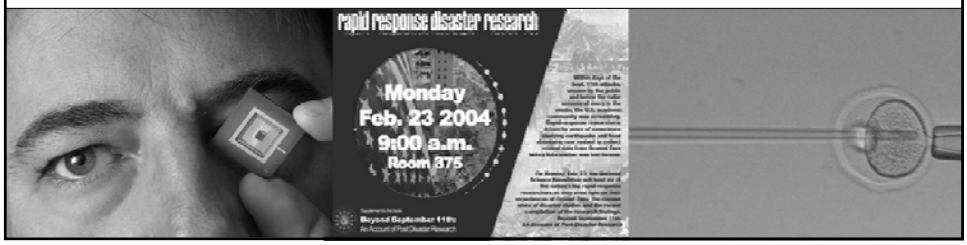
I'll mistakenly contradict agency policies in print / Please don't respond to a press query without calling OLPA first – we'll provide coaching, tips, even talking points if necessary (and we will be present at the interview if necessary, particularly television)

I'll be hounded by the press / Press should go through our office first – we'll work with you to schedule the interview

By preparing <u>together</u>,
we can address and minimize these concerns

Who to contact:

Josh Chamot
NSF Media Officer for ENG/MPS
(703) 292-7730
jchamot@nsf.gov



Montgomery K. Fisher
JD, PhD, CFE

Senior Counsel, Investigations
Office of Inspector General

What we do

Audits

- We used to audit SBIR awards, found many administrative problems & questioned costs
- SBIR awards are now fixed-price, so no more audits

Investigations

- We used to investigate fraud in receipt and use of SBIR grant funds, had numerous successful civil and criminal cases
- We still find fraud in receipt & use of SBIR grant funds ... but less often than previously

There are rules

A Good Budget

- Document your budget estimates
  - Retain subcontractor/vendor quotations
  - Notify the program officer if circumstances change before you receive the award
- Post-Award
  - If any budget items were disapproved upon award, do not spend grant funds on those items
  - Subcontracts or equipment purchases above $5,000 not in approved budget must be pre-approved
  - Under Phase II, report actual expenditures accurately

Must be a Small Business

- Company must fit SBA's definition of Small Business Concern, such as:
  - U.S. ownership
  - Fewer than 500 employees (including subsidiaries, parent, other affiliates)
- For Phase II, must be the <u>same</u> small business that received Phase I

No Duplicate Funding

- NSF will not make awards that duplicate or substantially overlap research funded by other agencies
- You must disclose whether your company has:
  - Received federal awards for related work, or
  - Submitted or intends to submit proposals for similar work to any other federal program

C&PS

- Current and Pending Support (C&PS)
  - Intended to show that the PI and senior personnel have time available to perform the proposed research during the grant period
  - Must provide information about all research to which the PI and other senior personnel either have committed time or plan to commit time

(If you lie about duplicative proposals/awards, you'll probably have to lie about C&PS too)

Work by the Grantee

- Phase I: two-thirds of the work must be performed by the grantee company
- Phase II: one-half of the work must be performed by the grantee company
- Work performed in a university lab is NOT performed by the grantee company — even if it is performed by the PI

PI's Primary Employment

- The PI's primary employment must be with the small business at the time of award
  - The PI canNOT be employed full-time elsewhere
- Change of PI requires advance written request via FastLane and approval by NSF

- If you are unsure about any of the rules:

  1. Email your PO with all relevant facts,
  2. Get written guidance from the PO, and
  3. Follow it.

Eschew Research Misconduct

- Fabrication, Falsification, & Plagiarism*
- Standards of research integrity are the *same* for SBIRs and academic community
- Our RM investigative process differs:
  - At research institutions, we refer RM allegations to the institution to investigate, then we review
  - *We* investigate all RM allegations involving SBIRs

*nsf.gov/oig/resmisreg.pdf

There are certifications

You certify when you apply

You confirm before you get the award

You certify to get your first payment

You certify
when you report

What will happen
to you if you
lie or steal?

Criminal Liability

- Lying to obtain an SBIR grant, or lying about what you did under a grant, violates several criminal laws, such as:
  - False Statements, 18 USC §1001
  - Theft of Federal Funds, 18 USC §641
  - Wire Fraud, 18 USC §1343
- You can go to prison, <u>and</u> have to pay full restitution plus fines

- Using SBIR grant funds for your personal use:
  - Criminal conversion, 18 USC §641
  - *And*, if you don't report it on your 1040: tax evasion, 18 USC §7201
- Lying to OIG or destroying evidence:
  - Obstruction of justice, 18 USC §1505, e.g. Martha Stewart
  - False statements, 18 USC §1001, e.g. Rod Blagojevich

Civil Liability

- The False Claims Act
  - **Treble damages** plus a fine of $11,000 for each false claim
  - "False Claims" include false information in the SBIR proposal, the Certification of Current Cost or Pricing Data, the Request for Initial Payment, and the interim and final reports

(For example, a false Phase I final report is a false claim for the final Phase I payment and for the full Phase II award)

- US ex rel. Longhi v. Lithium Power
  - Company lied about its qualifications to receive SBIR awards
  - No issue about its performance under the awards
  - "In a case such as this, where there is no tangible benefit to the government and the intangible benefit is impossible to calculate ...

Administrative Action By NSF

- Termination of Current Awards
- Suspension and Debarment
  - Prohibited from receiving federal awards or working under someone else's awards
  - Suspension during investigation and prosecution, followed by 3-year debarment
  - Successful civil or criminal prosecution is invariably followed by debarment

3
True
Stories

“Excel Technology, Inc.”

“Clinical & Industrial Technology, Inc.”

“M.L. Energia, Inc.”

Help!

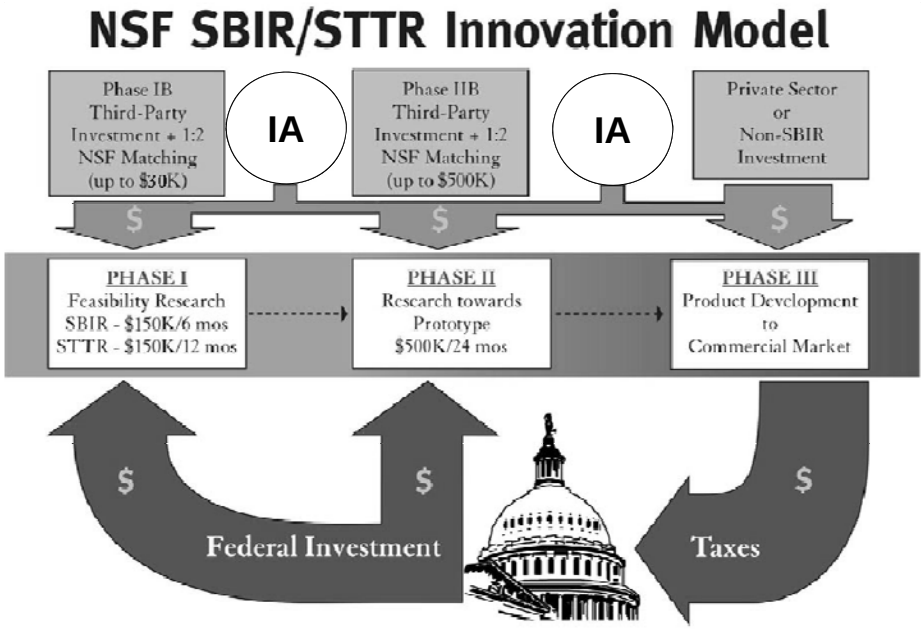
If you have any suggestions about how the NSF SBIR Program or the NSF OIG might better prevent or detect fraud in the SBIR program, please call or email me

Monte Fisher
NSF OIG
703-292-4987
mfisher@nsf.gov

oig.nsf.gov

Phase IB Supplement

Joseph Hennessey
Senior Advisor, SBIR/STTR Program
Industrial Innovation & Partnerships



Phase IB Objectives

- Foster relationships with strategic partners and investors
- Advance Phase I research
- Help bridge the Phase I/Phase II gap
- Accelerate commercialization

Phase IB Requirements

- An active SBIR Phase I award
- Funding from a third party investor
  - Cash
  - Liquid assets
  - Tangible financial instrument
  - In-kind, loans, self funding, etc not acceptable
  - A third party investor must commit a minimum of $30,000. NSF will contribute up to 50 percent of the outside investment, with a maximum NSF contribution of 20 percent of the Phase I award amount

Phase IB Requirements

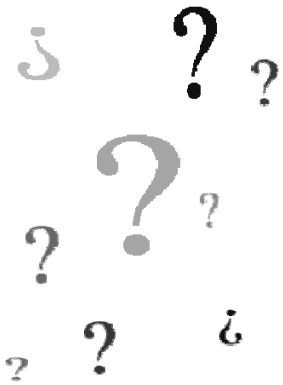
- **The submission deadline is October 15th for attendees at this workshop.**
- Your award can not be in a no-cost extension when you apply.
- Although it extends your Phase I end date, the Phase IB supplement ***does not alter or extend your Phase II submission deadlines.***
- NSF money for additional research; investor money for research or acceleration of commercialization

Phase IB Review Process

- Reviewed by NSF Program Director
- Preliminary notification 30 days after submitting proposal
- All financial documents must submitted via FastLane as part of the Phase IB proposal
- 100% of Phase IB funds provided at award
- Submit an "Interim Report" at the end of your original Phase I award period
- Submit a "Final Report" at the termination of the Phase IB extension.

Phase IB Supplement

- Phase I budget requirements apply
- Talk to your Phase I Program Director
- See the following website for details: http://www.nsf.gov/eng/iip/sbir/ibinstructions.jsp



Phase II
Commercialization Plan

Murali Nair, Ph.D., P.E.

Program Director

Key Points

1. **<u>What</u>** a commercialization plan is

2. **<u>Why</u>** "we" care

3. **<u>How</u>** to craft a powerful commercialization plan

Phase II Proposal Elements

1. Project Description

2. **Commercialization Plan**

3. Phase I Final Report

1. <u>What</u> a commercialization plan is

Commercialization Plan Overview

- **A Viable Business Proposition:**
  Fifteen (15) pages to **<u>convince</u>** NSF

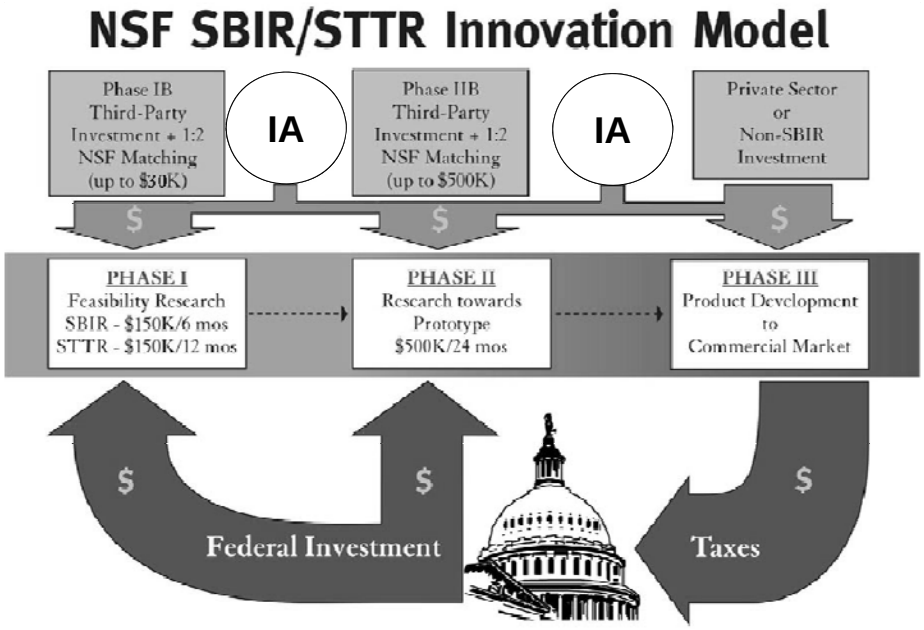
- Four (4) parts

  – Market Opportunity
  – Company/Team
  – Product, Technology & Competition
  – Finance & Revenue Model

Considerations

- Not ***Can*** it be done but ***Should*** it be done
- **Not contract R&D**: NSF not a customer
- NSF takes no equity position
- NSF wants successful **commercialization** of your innovation
- Demonstrate strategic partnerships
- Will need investment dollars beyond SBIR

2. Why "we" care



IA = Innovation Accelerator

Core Values

VISION

To be the pre-eminent federal resource driving the **expansion** of our nation's **innovation capacity** by stimulating **partnerships** among industry, academe, investors, government and other stakeholders

MISSION

Enhance our nation's **economic competitiveness** by catalyzing the **transformation** of discovery into societal benefits through stimulating partnerships and **promoting learning** environments for innovators

3. <u>How</u> to craft a powerful commercialization plan

Commercialization Plan Elements

- Market Opportunity
- Company/Team
- Product, Technology & Competition
- Finance & Revenue Model

Market Opportunity

- Customer pain-point; how need currently met; validation of what are they willing to pay
- Business model: e.g. service, product, license, fast-growth, acquisition
- Get-to-market strategy; required channels; critical milestones to get to market; market leaders; market dynamics
- Any strategic reason for nation to invest in this technology/business

Company/Team

- Entrepreneur's vision; corporate structure consistent with this vision
- Company's profile: Start-up, early stage or expanding company
- Team: Strengths/weaknesses; experience taking products to market
- Other stakeholders: Board, advisors, mentors, partners

Product, Technology & Competition

- Market validation – features/benefits compelling value prop to customers
- Development status - tasks/budget reasonable for proposed program
- Position in the IP landscape; patent search; plan to handle IP issues
- Competitive space/analysis; going to compete on price, performance or other

Finance & Revenue Model

- Demonstrate knowledge of cost to take innovation to market
- Plan to finance the commercialization effort
- Evidence of commitment for funding beyond Phase II effort
- Adequately describes/validates assumptions behind revenue model
- Revenue streams; timeline; cash-flow breakeven point
- Pro forma reasonable given state of innovation

Additional Considerations

- Ideas do **NOT** equal business opportunities
- Do your **HOMEWORK**: need compelling description of *opportunity*
- Obtain market validation **BEFORE** you submit your proposal
- Proposal as "selling" document - **YOUR ADVOCATE** at the table
- Why This? Why This Team? Why Now?

Commercialization Plan Review

- Commercialization plan counts for 50%
- Compelling "investment" for the American taxpayer?
- Review process
- Who sits at the table?
- Is my IP protected?
- What guidance does NSF give reviewers?

Key Points

1. **<u>What</u>** a commercialization plan is

2. **<u>Why</u>** "we" care

3. **<u>How</u>** to craft a powerful, compelling commercialization plan

Questions?

NSF SBIR/STTR
Commercial Reviewers in the Hot Seat

Carol Covin
Steve Lebischak
Al Mink
Jean-Luc Park
Marco Rubin
Errol Unikel

Ben Schrag, Ph.D.
Program Director

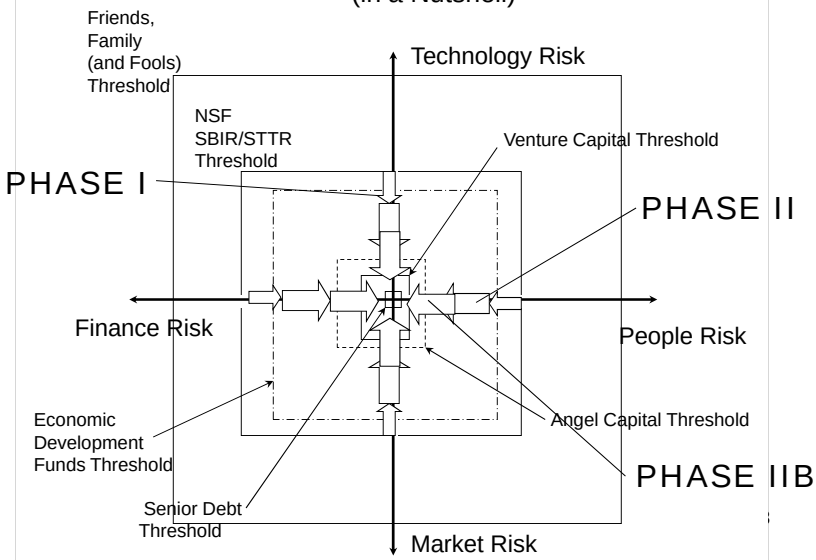
Day of the Panel

- Introductions
- Sign the NDAs / Logistics
- NSF SBIR/STTR Cultural “Indoctrination”
- Discuss the Proposals
- Recommendations, Panel Summaries

Cultural Indoctrination

- NSF Mission
- IIP Vision and Mission
- Program Stats
- Program Information
- Funding Criteria
- Review Criteria
  - Technical and Commercial
- Panel Outputs
  - Individual Reviews
  - Panel Summary

NSF SBIR
"Financing Your Vision"
(in a Nutshell)



Proposal Review

- 4-8 Proposals per panel (6 typical)
- 4-6 reviews per proposal
  - 1-1.5 hours before the panel
  - ~1 hour at the panel
- Each proposal gets 8-15 person-hours of consideration + Program Director's time

Questions

- How long have each of you been a reviewer?
- Outside of the proposal, do you do any other "research"?
- How does NSF protect proposers' IP?
- What causes a proposal to stand out?
- How important are the financials?
- How much input does the PD have in the process?

Thank You!

Phase II Proposal Preparation

Greg Baxter, SBIR/STTR
Bruce McKinnon, FastLane

Phase II Statistics

- Your chances of award ~1 in 3!
- Your award (with supplements) could grow up to $1 million or more!
- You can influence your chances by the quality of your proposal!
- BETTER THAN ANY LOTTERY Ticket!

Frequently Asked Questions

Take a look at the handout following this presentation for a detailed list of FAQs …

1. I can't find my Duns number on the coversheet?
2. How do I submit the proposal?
3. What is an "SRO"?
4. How to change the PI?

Frequently Asked Questions

5. How to add a CO-PI ? (Trick Question)
6. How do I change the PI between Phase I and Phase II?
7. How do I add senior personnel to my budget?
8. How do I change the PI for a subaward budget?

Frequently Asked Questions

9. Can I upload all of my "Supplementary Documents" as one file?
10. What is Current & Pending Support?
11. What is a Data Management Plan?

These are just a few of our FAQs. There are many more!

Phase I Solicitation Numbers

- SBIR Solicitation 10-607
  - Deadline was December 3, 2010

Phase II opportunities/deadlines:
January 31, 2012 or July 30, 2012

(stated in your Award letter; dates are NOT impacted by a Phase IB award)

Phase II Proposal Must be Complete

What is a complete proposal?

- Cover Sheet
- Project Summary
- Project Description
- References Cited
- Biographical Sketches
- Budget/Subaward Budgets and Budget Justifications
- Current and Pending Support
- Facilities, Equipment, and Other Resources
- Supplementary Docs
  - Phase I Final Report
  - Payment Schedule & Milestone Chart
  - Commercialization Plan
  - Letters of Support (3 max!)
  - Company Commercialization History
  - Letters regarding human subjects and animal use (if applicable)
  - Cooperative Research Agreement (STTR only)
  - Post-Doc Mentoring Plan (if applicable)
  - Data Management Plan

Most Common Phase II Proposal Deficiencies

- **Phase I Final Report missing**
  - **Please note that you must upload the Phase I Final Report to Fastlane as part of the Phase II proposal. This is IN ADDITION to uploading the report to close out your Phase I award and initiate the final payment.**
- **Milestone Chart missing**
- **Company Commercialization History (on NSF template!) missing if you answered "Yes" to prior Phase II funds**
- **References Cited, Current & Pending Support and/or Equipment/Facilities documents missing**
  - **These documents are required for all proposals to NSF.**
- **PI minimum 2 Calendar Months in the budget**

Suggestions

1. Read and follow the Phase II Step-by-Step Proposal Instructions for Fastlane (separate hand-out)
2. ***<u>Start Early</u>***
3. Use the Phase II Checklist (follows this handout)
4. Call your Program Manager if you have questions (don't wait until the last minute!)

Budget Year 1 & 2

SUMMARY PROPOSAL BUDGET — YEAR 1

ORGANIZATION: abc test
PROPOSAL NO.: FOR NSF USE ONLY
DURATION (months): Proposed / Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR: Terry Demo
AWARD NO.:

A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by NSF (if different)
1. Terry Demo - PI	4.00	0.00	0.00	$ 40,000	$
2. Frederick Scott - Engineer	1.50	0.00	0.00	15,000	
3. Joseph Smith - Engineer	1.50	0.00	0.00	15,000	
4.					
5.					
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0	
7. (3) TOTAL SENIOR PERSONNEL (1-6)	7.00	0.00	0.00	70,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (2) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	2.00	0.00	0.00	3,000	
3. (0) GRADUATE STUDENTS				0	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				73,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				73,000	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)					
High Performance Server $ 6,500					
Miniature Spectrometer 7,500					
TOTAL EQUIPMENT				14,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)				7,500	
2. FOREIGN				0	
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS $ 0					
2. TRAVEL 0					
3. SUBSISTENCE 0					
4. OTHER 0					
1. (0) TOTAL PARTICIPANT COSTS				0	
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				3,500	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				0	
3. CONSULTANT SERVICES				5,710	
4. COMPUTER SERVICES				0	
5. SUBAWARDS				85,000	
6. OTHER				50,000	
TOTAL OTHER DIRECT COSTS				144,210	
H. TOTAL DIRECT COSTS (A THROUGH G)				233,710	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
G&A (Rate: 30.7400, Base: 73000)					
TOTAL INDIRECT COSTS (F&A)				22,440	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				255,650	
K. FEE (IF REQUESTED MAXIMUM = 7% OF J)				17,895	
L. TOTAL COST AND FEE (J + K)				$ 273,545	$

PI/PD NAME: Terry Demo
ORG. REP. NAME*:
FOR NSF USE ONLY — INDIRECT COST RATE VERIFICATION: Date Checked / Date Of Rate Sheet / Initials - ORG

1 *ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET — YEAR 2

ORGANIZATION: abc test
PROPOSAL NO.: FOR NSF USE ONLY
DURATION (months): Proposed / Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR: Terry Demo
AWARD NO.:

A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by NSF (if different)
1. Terry Demo - PI	4.00	0.00	0.00	$ 40,000	$
2. Frederick Scott - Engineer	3.00	0.00	0.00	27,500	
3. Joseph Smith - Engineer	2.50	0.00	0.00	18,750	
4.					
5.					
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0	
7. (9) TOTAL SENIOR PERSONNEL (1-6)	9.50	0.00	0.00	91,250	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (4) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	4.00	0.00	0.00	12,000	
3. (0) GRADUATE STUDENTS				0	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				103,250	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				103,250	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)					
TOTAL EQUIPMENT				0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)				7,000	
2. FOREIGN				0	
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS $ 0					
2. TRAVEL 0					
3. SUBSISTENCE 0					
4. OTHER 0					
1. (0) TOTAL PARTICIPANT COSTS				0	
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				5,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				0	
3. CONSULTANT SERVICES				5,710	
4. COMPUTER SERVICES				0	
5. SUBAWARDS				30,000	
6. OTHER				10,000	
TOTAL OTHER DIRECT COSTS				50,710	
H. TOTAL DIRECT COSTS (A THROUGH G)				145,960	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
G&A (Rate: 30.7400, Base: 95250)					
TOTAL INDIRECT COSTS (F&A)				29,265	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				174,825	
K. FEE (IF REQUESTED MAXIMUM = 7% OF J)				12,223	
L. TOTAL COST AND FEE (J + K)				$ 187,048	$

PI/PD NAME: Terry Demo
ORG. REP. NAME*:
FOR NSF USE ONLY — INDIRECT COST RATE VERIFICATION: Date Checked / Date Of Rate Sheet / Initials - ORG

2 *ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

Cumulative Phase II Budget

SUMMARY PROPOSAL BUDGET — Cumulative

ORGANIZATION: abc test
PROPOSAL NO.: FOR NSF USE ONLY
DURATION (months): Proposed / Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR: Terry Demo
AWARD NO.:

A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by NSF (if different)
1. Terry Demo - PI	8.00	0.00	0.00	$ 80,000	$
2. Frederick Scott - Engineer	4.50	0.00	0.00	42,500	
3. Joseph Smith - Engineer	4.00	0.00	0.00	33,750	
4.					
5.					
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0	
7. (12) TOTAL SENIOR PERSONNEL (1-6)	16.50	0.00	0.00	161,250	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (6) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	6.00	0.00	0.00	15,000	
3. (0) GRADUATE STUDENTS				0	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				166,250	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				166,250	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)					
TOTAL EQUIPMENT				14,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)				14,500	
2. FOREIGN				0	
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS $ 0					
2. TRAVEL 0					
3. SUBSISTENCE 0					
4. OTHER 0					
1. (0) TOTAL PARTICIPANT COSTS				0	
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				8,500	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				0	
3. CONSULTANT SERVICES				11,420	
4. COMPUTER SERVICES				0	
5. SUBAWARDS				115,000	
6. OTHER				60,000	
TOTAL OTHER DIRECT COSTS				194,920	
H. TOTAL DIRECT COSTS (A THROUGH G)				379,170	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)				51,105	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				430,275	
K. FEE (IF REQUESTED MAXIMUM = 7% OF J)				30,118	
L. TOTAL COST AND FEE (J + K)				$ 460,393	$

PI/PD NAME: Terry Demo
ORG. REP. NAME*:
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*ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

Year 1 Budget Justification

Year 1 Budget Justification

A. Senior Personnel
Dr. Terry Demo - PI will work 2 person months on the project at $20,000 per month for a total of $40,000 in year 1.

Frederick Scott - Mechanical Engineer will work 1.5 person months at $7,500 per month for a total of $15,000 in year 1.

G. Other Direct Costs
G1. Materials and Supplies
Hg source $750/unit 2 units = $1500
Sensors $250/unit 4 units = $1000
Chemical samples $200/unit 5 units = $1000

K. Fee
The fee is within the NSF maximum of 7% of the total of direct and indirect costs. $17,895.

G5. Subawards
A subaward budget is to Johns Hopkins University for their work on the high performance computing elements is for $85,000 for year (see attached subaward budget and justification)

G6. Other
Analytical testing will be provided by XYX Corporation. Each test will cost $10,000 and will be performed 5 tests the first year for a total of $50,000

performed 5 tests the first year for a total of $50,000

I. Indirect Costs
The indirect cost rate for this project is 30% for salaries and wages (30% * 73,000).

K. Fee
The fee is within the NSF maximum of 7% of the total of direct and indirect costs. $17,895.

Year 2 Budget Justification

Year 2 Budget Justification

A.Senior Personnel
Dr. Terry Demo - PI will work 2 person months on the project at $20,000 per month for a total of $40,000 in year 2.

Federick Scott - Mechanical Engineer will work 3 person months at $7,500 per month for a total of $22,500 in year 2.

Joseph Smith - Electrical Engineer will work 2.5 person months at $7,500 per month for a total of $18,750 in year 2.

B. Other Personnel
1 Technicians will work 1 person month for a total of $12,000 in year 2.

E. Travel
Attendance to the required NSF Phase II Grantees Conference $2,000

G. Other Direct Costs
G1. Materials and Supplies
Hg source $750/unit 4 units = $3,000
Sensors $250/unit 4 units = $1000
Chemical samples $200/unit 5 units = $1000

G3. Consultant Services
The signed consultant agreement is contained in the proposal. Dr. Snow has agreed to work (X) days at the NSF maximum consultant rate of $600 per day in the second year.

G5. Subawards
A subaward budget is to Johns Hopkins University for their work on the high performance computing elements is for $30,000 for year (see attached subaward budget and justification)

G6. Other
Analytical testing will be provided by XYX Corporation. One test will cost $10,000.

I. Indirect Costs
The indirect cost rate for this project is 30% for salaries and wages (30% * 93,250).

K. Fee
The fee is within the NSF maximum of 7% of the total of direct and indirect costs $13,929.

Subcontractor Year 1 & 2

SUMMARY PROPOSAL BUDGET YEAR 1

ORGANIZATION: Johns Hopkins University				FOR NSF USE ONLY: PROPOSAL NO.	DURATION (months): Proposed / Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR: Randolph Macon				AWARD NO.	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty, and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by NSF (if different)
1. Randolph Macon - Professor	2.00	0.00	0.00	$ 20,000	$
2. Thomas Payne - Assoc. Professor	4.00	0.00	0.00	18,000	
3.					
4.					
5.					
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0	
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	6.00	0.00	0.00	38,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	0	
3. (2) GRADUATE STUDENTS				20,000	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				58,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				58,000	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)					
TOTAL EQUIPMENT				0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)				2,000	
2. FOREIGN				0	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS $ 0; 2. TRAVEL 0; 3. SUBSISTENCE 0; 4. OTHER 0					
(0) TOTAL PARTICIPANT COSTS				0	
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				15,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				0	
3. CONSULTANT SERVICES				0	
4. COMPUTER SERVICES				0	
5. SUBAWARDS				0	
6. OTHER				10,000	
TOTAL OTHER DIRECT COSTS				25,000	
H. TOTAL DIRECT COSTS (A THROUGH G)				85,000	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) (Rate: , Base:)					
TOTAL INDIRECT COSTS (F&A)				0	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				85,000	
K. FEE (IF REQUESTED MAXIMUM = 7% OF J.)				0	
L. TOTAL COST AND FEE (J + K)				$ 85,000	$

PI/PD NAME: Randolph Macon
ORG. REP. NAME*

FOR NSF USE ONLY — INDIRECT COST RATE VERIFICATION: Date Checked | Date Of Rate Sheet | Initials - ORG

1 *ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET YEAR 2

ORGANIZATION: Johns Hopkins University				FOR NSF USE ONLY: PROPOSAL NO.	DURATION (months): Proposed / Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR: Randolph Macon				AWARD NO.	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty, and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by NSF (if different)
1. Randolph Macon - Professor	0.50	0.00	0.00	$ 5,000	$
2. Thomas Payne - Assoc Professor	2.00	0.00	0.00	9,000	
3.					
4.					
5.					
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0	
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	2.50	0.00	0.00	14,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	0	
3. (2) GRADUATE STUDENTS				10,000	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				24,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				24,000	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING $5,000.)					
TOTAL EQUIPMENT				0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)				2,000	
2. FOREIGN				0	
F. PARTICIPANT SUPPORT COSTS 1. STIPENDS $ 0; 2. TRAVEL 0; 3. SUBSISTENCE 0; 4. OTHER 0					
(0) TOTAL PARTICIPANT COSTS				0	
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES				4,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION				0	
3. CONSULTANT SERVICES				0	
4. COMPUTER SERVICES				0	
5. SUBAWARDS				0	
6. OTHER				0	
TOTAL OTHER DIRECT COSTS				4,000	
H. TOTAL DIRECT COSTS (A THROUGH G)				30,000	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) (Rate: , Base:)					
TOTAL INDIRECT COSTS (F&A)				0	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				30,000	
K. FEE (IF REQUESTED MAXIMUM = 7% OF J.)				0	
L. TOTAL COST AND FEE (J + K)				$ 30,000	$

PI/PD NAME: Randolph Macon
ORG. REP. NAME*

FOR NSF USE ONLY — INDIRECT COST RATE VERIFICATION: Date Checked | Date Of Rate Sheet | Initials - ORG

2 *ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

Subcontractor Cumulative Budget

SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION: Johns Hopkins University				FOR NSF USE ONLY: PROPOSAL NO.	DURATION (months): Proposed / Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR: Randolph Macon				AWARD NO.	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty, and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months CAL	ACAD	SUMR	Funds Requested By proposer	Funds granted by NSF (if different)
1. Randolph Macon - Professor	2.50	0.00	0.00	$ 25,000	$
2. Thomas Payne - Assoc Professor	6.00	0.00	0.00	27,000	
3.					
4.					
5.					
6. ( ) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0	
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	8.50	0.00	0.00	52,000	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	0	
3. (4) GRADUATE STUDENTS				30,000	
4. (0) UNDERGRADUATE STUDENTS				0	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0	
6. (0) OTHER				0	
TOTAL SALARIES AND WAGES (A + B)				82,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)				0	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)				82,000	

K. FEE (IF REQUESTED MAXIMUM = 7% OF J.) 0

2. TRAVEL 0; 3. SUBSISTENCE 0; 4. OTHER 0	
(0) TOTAL PARTICIPANT COSTS	0
G. OTHER DIRECT COSTS	
1. MATERIALS AND SUPPLIES	19,000
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	0
3. CONSULTANT SERVICES	0
4. COMPUTER SERVICES	0
5. SUBAWARDS	0
6. OTHER	10,000
TOTAL OTHER DIRECT COSTS	29,000
H. TOTAL DIRECT COSTS (A THROUGH G)	115,000
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	
TOTAL INDIRECT COSTS (F&A)	0
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)	115,000
K. FEE (IF REQUESTED MAXIMUM = 7% OF J.)	0
L. TOTAL COST AND FEE (J + K)	$ 115,000 $

PI/PD NAME: Randolph Macon
ORG. REP. NAME*

FOR NSF USE ONLY — INDIRECT COST RATE VERIFICATION: Date Checked | Date Of Rate Sheet | Initials - ORG

C *ELECTRONIC SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

Subcontractor Budget Justification

Subaward Year 1 Budget Justification

A. Senior Personnel
Dr. Randolph Macon - Professor will work 2 person months on the project at $10,000 per month for a total of $20,000 in year 1.

Dr. Thomas Payne – Associate Professor will work 4 person months on the projects at $4,500 per month for a total of $18,000 in year 1.

B. Other Personnel
2 graduate students will work 6 person months (each) for a total of $20,000 in year 1.

E. Travel
Attendance to the NSF Phase II Grantees Conference $2,000 (either Dr. Macon or Dr. Payne will attend)

G. Other Direct Costs
G1. Materials and Supplies
Sensors $250/unit 20 units = $5,000
Laboratory glassware $2,500
Chemical samples $200/unit 20 units = $4,000
Servo motors $350/each 10 motors = $3,500

G6. Other
Analytical testing will be provided by XYX Corporation. Each test will cost $10,000 and will be performed 1 test the first year for a total of $10,000

Subaward Year 2 Budget Justification

A. Senior Personnel
Dr. Randolph Macon - Professor will work 0.5 person months on the project at for a total of $5,000 in year 2.

Dr. Thomas Payne – Associate Professor will work 2 person months on the projects at $4,500 per month for a total of $9,000 in year 2.

B. Other Personnel
2 graduate students will work 3 person months (each) for a total of $10,000 in year 1.

E. Travel
Attendance to the NSF Phase II Grantees Conference $2,000 (either Dr. Macon or Dr. Payne will attend)

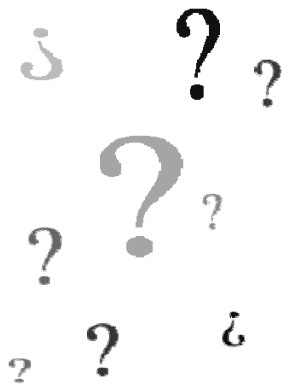
G. Other Direct Costs
1. Materials and Supplies
Chemical samples $200/unit 20 units = $4,000

Postdoctoral Mentoring Plan

- The company should NOT budget funds on the “Post Doctoral Scholars” line B.1
- If you have a sub-award budget that includes funds on line B.1 Post Doctoral Scholars, you must include a “Post Doc Mentoring Plan” as a supplementary document
- A template is provided on our web site http://www.nsf.gov/eng/iip/sbir/forms.jsp

Data Management Plan

- All proposals to NSF must now contain a supplementary document labeled "Data Management Plan"
- Fastlane will not permit you to upload a proposal without a Data Management Plan
- More information can be found at http://www.nsf.gov/bfa/dias/policy/dmpfaqs.jsp
- SBIR/STTR has received approval for our submitters to include this statement in the DMP module to enable submission: "All data generated in this SBIR (or STTR) Phase II project is considered proprietary."



Financial and Administrative Reviews

Willie Mae Powell, Cost Analyst
Sohel Ahmed, Cost Analyst
Division of Institution and Award Support
Cost Analysis and Audit Resolution (CAAR)

Recommended For Funding

- What happens next:
  - Referred to Cost Analysis Audit Resolution website: http://www.nsf.gov/bfa/dias/caar/sbirrev.jsp
  - NSF Prospective New Awardee Guide
    - Documentation submitted to NSF within 10 calendar days
      - Note: Section B-Administrative Management Information
  - NOTE: Other NSF contractors may be utilized to perform a review of the submitted documentation.

CAAR Reviews

- Financial Capability
- Accounting and Timekeeping
- Budget

Financial Capability

Organizations must provide two (2) recent accounting years of:

- Financial Statements
- Most recent audit (CPA Compiled)
- Tax returns

Considerations for Determining Adequacy of Accounting Systems

- Responses to “Financial Management Systems Questionnaire”
- Sample Timesheet
- Federal Audits and Accounting System Reviews, if available

Accounting System – Basic Requirements

- Detailed budget preparation with proposed cost based on actual historical cost data
- Identification of expenditures as direct, indirect and unallowable
- Identification of costs (budgeted costs and actual expense) by project/grant
- Complete and accurate financial reports (balance sheet, income statement, and cash flow statement)
- Maintenance of adequate source documentation (purchase orders, invoices, canceled checks, etc.)

Timekeeping System

- Name and signature of employee & supervisor
- Total hours an employee worked during a given pay period
- Specific activities during the pay period (i.e., projects, G&A, vacation, sick, leave without pay, etc.)

Budgeted Costs

Funding Criteria:

- Necessary for conduct of the project
- Allowable, reasonable, allocable
- Based on current cost and pricing information (invoices, purchase orders, catalog, quotations)

Allocability (FAR 31.201-4)

- Incurred specifically for the project (Direct)
- Necessary to the overall operation of the business (Indirect)

Indirect Costs

- Safe Rate: 50% Salaries and Wages
- Ceiling: 150% Salaries and Wages

Indirect Costs budgeted at an effective rate greater than 50%

- Calculation for most recently completed Fiscal Year
- Total costs per the IDC calculation must reconcile with the Statement of Profit & Loss
- Adjustments:
  - IR&D treated as direct costs
  - Patent
  - Sales/Marketing & Business Development
  - Manufacturing & Production
  - IDC S&W > 35% total S&W less paid time off
  - Subawards are generally excluded from base
- No Facilities Capital Cost of Money (FCCM)

Major Cause of Budget Reduction

- Unsupported Salaries and Wages
  - Standard Occupational Classifications (SOC)
  - DOL/BLS Salary Survey
    - (Occupational Employment Statistics Mean average)
  - Salary Escalation
  - Reasonableness

Reductions in Proposed S&W = Reduction in proposed Indirect cost.

Other Budget Highlights

- Salaries and Wages
  - 1 CAL = 173 hours
- Items or Extended Amounts > $5,000
- Consultant Limitation ($600/Day)

Summary

- Financial Capability Review - Adequate financial resources to perform the award
- Accounting System Review - Meets the basic requirements for a Federal award
- Budget Review - Budgeted amount is fair and reasonable based on certified cost and pricing data

Certificate of Current Cost or Pricing Data

- Certification that supporting documentation is based on accurate, complete, and current cost and pricing data
- Requested by DGA after final determination of the amount to be awarded

Cost Analysis & Audit Resolution

Telephone (703) 292-8244

Fax: (703) 292-9141

E-mail: bfacaarsbir@nsf.gov

http://www.nsf.gov/bfa/dias/caar/index.jsp

SBIR/STTR Phase II Grant Process

NSF SBIR PHASE I WORKSHOP
September 29, 2011

Ask Early, Ask Often

- Jamie French
  - Team Lead
  - Division of Grants & Agreements
  - Email: jhfrench@nsf.gov
  - Voice: 703.292.8644

SBIR Phase II Grant Process

NSF Division of Grants and Agreements (DGA)

What does DGA do, and why do I care?

- The Division of Grants and Agreements (DGA) supports the issuance of NSF assistance awards and other agreements by providing business, financial, and award administration assistance from pre-award through closeout.
- DGA turns your proposal into an AWARD!
- Remember, your award with NSF is a grant, not a contract.

Phase II Awards- the Process

- You be contacted by DGA once CAAR has completed the financial review.
- DGA will forward the breakdown of costs for the project based on the review, noting any changes from your proposed budget.
- You will certify the cost data associated with your proposal is current and accurate.
- DGA will finish our review and turn it into an award!

SAMPLE AWARD LETTER

Some very important information is contained in your award letter…

Award Date: November 31, 2009
Award No. IIP-0900000
Proposal No. IIP-0900000

Andrea Kline
President
Kline Industries LLC
123 Sunshine Dr
Happyville, MD 25816

Dear Dr. Kline;

The National Science Foundation hereby awards a grant of $150,000 to Kline Industries LLC for support of the project described in the proposal referenced above as modified by revised budget dated August 18, 2009.

This project, under your direction, is entitled:

"SBIR Phase I: The Secret to Living a Long and Happy Life."

This award is effective January 1, 2010 and expires June 30, 2010.

This grant is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Program Solicitation, "Small Business Innovation Research Program Phase I Solicitation FY-2010, (NSF 09-541) and SBIR Phase I Grant General Conditions (11/05).

This is a fixed amount grant intended to support the proposed level of effort for six (6) months. The Phase I Final Report is due within fifteen (15) days following the end of the six (6) month performance period.

The SBIR Phase I Grant General Conditions applicable to this award are available at http://www.nsf.gov/pubs/gc1/sbiri1105.pdf

Request for initial payment which is 2/3 of the total award must be submitted to the NSF Division of Financial Management using the SBIR Award Request for Initial Payment Form available at http://www.nsf.gov/eng/iip/sbir/forms.jsp. This form should be e:mailed to drobinso@nsf.gov or faxed to Denise Robinson at 703-292-9005. To receive payment, SBIR grant recipients must register with the Central Contractor Registry (CCR) at http://www.ccr.gov. NSF will use the grantee address and electronic funds transfer information from CCR to register your official address and banking information for payments.

Your Phase II proposal must be submitted by July 30, 2010 or January 31, 2011. Extensions to your Phase I award will not affect these dates.

Reviews and if applicable, the Panel Summary may be found at: https://www.fastlane.nsf.gov/jsp/homepage/proposals.jsp You will need your FastLane password to access this website. If you do not have or cannot remember your password, please go to https://www.fastlane.nsf.gov/jsp/homepage/proposals.jsp for instructions on resetting or obtaining passwords.

The attached budget indicates the amounts, by categories, on which NSF has based its support.

The cognizant NSF program official for this grant is Greg Baxter (703) 292-7795.
The cognizant NSF grants official contact is Stephanie Gorman (703) 292-4809.

Sincerely,

Jamie H. French
Grants and Agreements Officer

Definition- Fixed Price Award

From the NSF Proposal Guide…

- NSF agrees to provide a specific level of support without regard to actual costs incurred under the project.
- The award amount is negotiated using the applicable cost principles or other pricing information.
- Payments are based on meeting specific requirements of the grant and accountability is based primarily on technical performance.

Frequently Asked Questions

I received an NSF SBIR/STTR award, but now I have frequently asked questions….

Why didn't I receive my initial payment?

If you haven't received your initial payment, ask yourself these important questions:

- Is my current banking info in CCR?
- What is the effective date of my award?
- Have I waited a sufficient amount of time after the effective date for the payment to be issued and received (10 days)?

Why didn't I receive my interim/final payment?

Ask yourself these important questions:

- Did I submit my report?
- Did my program officer approve that report?
- Have I waited a sufficient amount of time after my report was approved for the payment to be issued and received (10 days)?

Thanks for my supplement, but where's the money?

- Unless otherwise specified in the award letter, supplements to the Phase II are paid in full automatically, and should show up in your account in 10-14 days.
- This means you do not have to fill out an initial payment request for a supplement.

Payment issues

Payments are processed by NSF's Grantee Cash Management Section

- Phase I- Denise Robinson drobinso@nsf.gov
- Phase II- Dorothy Battle dbattle@nsf.gov
- NSF cannot update your banking information, you must update it in CCR.

Can I begin work or spend funds before the award effective date?

- Yes, at you own risk…
- Allowable expenses within 90 days of effective date may be spent without pre-approval
- Allowable expenses more than 90 days prior to effective date require approval via FastLane

How do I change my company's name with NSF?

Inform your program officer of the name change, then send DGA these items:

- The document effecting your name change, authenticated by a proper official in the state having jurisdiction.
- A list of all affected awards between the Awardee (you) and NSF.
- The opinion of your legal counsel that this was properly effected under applicable law.

Company has been sold/merged, can I transfer my award?

If a third party's interest in the award arises out of the transfer of (1) all the Awardee's assets or (2) the entire portion of the assets involved in performing the award, examples include:

- Sale of these assets with a provision for assuming liabilities;
- Transfer of these assets incident to a merger or corporate consolidation; and
- Incorporation of a proprietorship or partnership, or formation of a partnership.

Novation Agreement

A *Novation Agreement is a legal instrument executed by (a) the Awardee (transferor),* (b) the successor in interest (transferee), and (c) the Government by which, among other things, the transferor guarantees performance of the award, the transferee assumes all obligations under the award, and the Government recognizes the transfer of the award and related assets.

When should I obtain IRB approval?

All projects involving human subjects must either (1) have approval from the organization's Institutional Review Board (IRB) BEFORE issuance of an NSF award or, (2) must affirm that the IRB has declared the research exempt from IRB review, in accordance with the applicable subsection, as established in section 101(b) of the Common Rule.

Our Phase II budget was reduced significantly because my company:

- Didn't provide sufficient documentation to the CPA firm or CAAR
- Ignored the submission instructions on the CAAR website
- Proposed salaries not supported by payroll registers or that could not be sustained with commercial activity
- Included a bunch of unallowable costs in the IDC proposal

Where should I direct my concerns?

Resources

- SBIR/STTR Solicitations
- SBIR/STTR grant conditions
  - www.nsf.gov/publications/pub_summ.jsp?ods_key=sbiri110
  - www.nsf.gov/publications/pub_summ.jsp?ods_key=sbirii110
- Protection of Human Subjects
  - www.nsf.gov/bfa/dias/policy/docs/45cfr690.pdf
- Excluded Party List www.epls.gov

PHASE I COMMERCIALIZATION PLANNING PROGRAM [CP²]™

Dawnbreaker is pleased to be working with you through the NSF CP² program. Since 2001 we have assisted over 1,500 NSF Phase I recipients through this program. Dawnbreaker employs a team of 63 talented individuals that conduct programmatic interventions on behalf of federal agencies and state municipalities. We are technology generalists and work with companies with widely diverse backgrounds including energy, materials, electronics, defense, biotech, information technologies, therapeutics and diagnostics. As the SBIR program has matured, expectations that the agencies have of small businesses relative to commercialization have changed. To address these evolving needs, we introduced updated program methodology and new program initiatives in August 2009. As in the past we will aid participants in the development of quality commercialization plans. However, increased emphasis will also be given to helping companies understand the competitive IP landscape into which their technology will eventually enter, and beginning to initiate necessary strategic relationships with potential partners, licensees and/or investors thereby setting the stage for successful participation in Phase IIB and success in Phase III

Dawnbreaker's work with July 2011 NSF SBIR Phase I awardees began in mid August and continues until the time that you submit your Phase II proposal to NSF - either January 2012 or July 2012. Our work continues with January 2011 NSF SBIR Phase I awardees and July 2010 NSF STTR Phase I awardees that postponed their Phase II submission to NSF until January 2012. January 2012 is the final submission date for this group.

Dawnbreaker's work with July 2011 NSF STTR Phase I awardees will begin in mid February and continues until the time that you submit your Phase II proposal to NSF - either July 2012 or January 2013.

NSF Phase I Grantee Workshop Interactions

We look forward to continuing our interaction with you. During the Grantee Workshop, one-on-one meetings have been scheduled between representatives of your firm and the Dawnbreaker business acceleration manager assigned to work with you. Please stop by our table in the registration area if you have any questions regarding participation in the program, your meeting time and/or meeting location and we will be glad to assist you.

The purpose of your one-on-one meeting is to finalize your market research needs, review feedback on the first draft of Section 1 of your commercialization plan, and discuss activities related to participation in our Virtual Strategic Partner Introduction (VSPI™) Series. If you are meeting with us but planning to submit in July 2012, please just be prepared to discuss your company, the technology under development and how it fits within the vision for your company, the strategy to bring it to market, your knowledge of the competitive landscape, and any existing/necessary relationships.

We are glad to have this opportunity to meet with you personally at the Grantee Workshop.

Carol Rabke, Ph.D.
Program Manager, NSF CP²

crabke@dawnbreaker.com
(585) 425-3212

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www.dawnbreaker.com

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rsmerbeck@dawnbreaker.com

Carol VanBuren
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cvanburen@dawnbreaker.com

Dawnbreaker: One-on-One Meeting Schedule

in alphabetical order by Company Name

Organization	Award #	PI First Name	PI Last Name	Title	Dawnbreaker Rep	Dawnbreaker One-on-One Meeting Time
Abeam Technologies	1113135	Christophe	Peroz	SBIR Phase I: Holographic Laser: High-Brightness, High-Power Laser Diode	Carol Rabke	3:00 PM
Absorbent Materials Company, LLC	1113260	Hanbae	Yang	SBIR Phase I: Development of Physico-Chemically & Biologically Activated Swelling Organosilica-Metal Composites Filter Media in Bioretention Systems for Enhanced Remediation of Ur	Bob Lockwood	2:30 PM
Acoustic Biosystems, Inc.	1113300	Reza	Shekarriz	SBIR Phase I: Resonant Acoustic Cell Enrichment (RACE) Technique for Rare Cell Detection in Blood	Carol Van Buren	4:30 PM
Akron Air Materials, LLC	1113370	Dennis	Townsend	SBIR Phase I: Development of Integrated Oil Debris Sensors for Machinery Fault Detection and Conditioning Monitoring	Terry McMahon	1:00 PM
Alpha Universe, LLC	1113377	Alexey	Zdanovsky	SBIR Phase I: Inexpensive and Effecient System for Signal Amplification	Carol Van Buren	3:00 PM
Aluminastic Corporation	1113469	Matthew	Blankenhorn	SBIR Phase I: Novel Casting Process for Developing a Carbon Modified Hyper-Eutectic Aluminum-Silicon Alloy for Forging Wear Resistant Parts	Carol Rabke	2:00 PM
ANDalyze	1113908	Debapriya	Mazumdar	SBIR Phase I: Dip-stick Tests for Detection of Heavy Metals in Water	Bob Lockwood	3:00 PM
Applied Nanostructures, Inc.	1113523	Ami	Chand	SBIR Phase I: Integrated Thermal Scanning Probe Development	Carol Rabke	1:00 PM
ApprenNet, LLC	1113008	Karl	Okamoto	SBIR Phase I: Crowd Sourcing Apprenticeship Learning: A Web Platform for Teaching Entrepreneurial Lawyering	Tallam Nguti	2:00 PM
Arbor Photonics	1113631	Michelle	Stock	SBIR Phase I: Cost-Effective, High Volume Emitter Wrap Through Manufacturing Process Development for Higher Efficiency Crystalline Silicon Solar Cells	Sherry Hostetter	1:00 PM
armONx	1112165	Kevin	Robinson	SBIR Phase I: Low-Cost Photocatalytic Treatment to Seal Existing Concrete, Stone, Masonry or Other Cementitious Surfaces and Make Them Self-Cleaning	Terry McMahon	1:30 PM
Artaic, LLC	1113606	Edward	Acworth	SBIR Phase I: High-Throughput Agile Robotic Manufacturing System for Tile Mosaics	Tallam Nguti	3:00 PM
Arzeda Corporation	1114078	Alexandre	Zanghellini	SBIR Phase I: High-yield Fermentation of Sugars to Levulinic Acid	Carol Rabke	ALT
Ascentia Imaging, Inc.	1112908	Gregory	Johnson	SBIR Phase I:Metrology for Precision Machining	Carol Rabke	1:30 PM
ATSP Innovations, LLC	1113825	James	Economy	SBIR Phase I: Ultra-Low Wear Coatings Based on a Novel Family of Aromatic Thermosetting Copolyesters	Terry McMahon	4:00 PM
BioHeatMap, Inc.	1114059	Robert	Meadows	SBIR Phase I: Data Integration and Analysis for the Pharmaceutical Industry	Carol Van Buren	2:30 PM
Bioremediation Consulting, Inc.	1113457	Margaret	Findlay	SBIR Phase I: Development of a Commercial Culture of Dehalococcoides for Anaerobic Treatment of PCB's	Bob Lockwood	4:30 PM
Cadence Fluidics Company	1113588	Neil	Picha	SBIR Phase I: Fluidic Processor	Terry McMahon	3:30 PM
CatheNect Medical, Inc.	1114081	Julia	Rasooly	SBIR Phase I: Novel Peritoneal Dialysis Catheter to Reduce Infections	Carol Van Buren	1:30 PM
Ceralink Inc.	1113635	Shawn	Allan	SBIR Phase I: Microwave Heating of Reaction-Bonded Silicon Carbide Ceramics	Bob Lockwood	2:00 PM
Chembionics, Inc.	1113303	Harry	Jabs	SBIR Phase I: Novel Mechanisms for Non-rotational Wind Energy Conversion	Sherry Hostetter	3:30 PM
Civionics, LLC	1113466	Andrew	Zimmerman	SBIR Phase I: A Multifunctional Piezoelectric Smart Flooring System for Energy Efficient Control in Commercial Building Systems	Sherry Hostetter	1:30 PM
ClearEdge3D	1113653	Kevin	Williams	SBIR Phase I: Novel Algorithms for Automated 3D Building Models and 3D Street Maps	Tallam Nguti	4:00 PM
Community Knowledgebase, LLC	1113297	Lewis	Friedland	SBIR Phase I: Building an Integrated Software Platform for Civic Epistemic Gaming	Tallam Nguti	1:00 PM
CU Aerospace, LLC	1113365	David	Carroll	SBIR Phase I: MatLab Based Toolbox for Promoting Engineering Education of L1 Adaptive Control Theory	Terry McMahon	3:00 PM
Deton Corp.	1113148	Patrick	Sislian	SBIR Phase I: Cough Analyzer of Airborne Bacteria for Tuberculosis Diagnosis	Carol Van Buren	3:30 PM
Diani Systems, LLC	1113090	Gary	Sugar	SBIR Phase I: High Resolution Channel Sounding for Indoor TDOA Positioning Using Narrowband RF Transceiver	See Dawnbreaker to Register	
Dynaflow, Inc.	1113384	Greg	Loraine	SBIR Phase I: Extraction of Lipids from Algal and Collection by Foam Fractionation	Carol Rabke	3:30 PM

Dawnbreaker: One-on-One Meeting Schedule

in alphabetical order by Company Name

Organization	Award #	PI First Name	PI Last Name	Title	Dawnbreaker Rep	Dawnbreaker One-on-One Meeting Time
E2E Materials, Inc.	1113577	Robert	Rasmussen	SBIR Phase I: Multi-Use Moisture Resistant Green Composites	Sherry Hostetter	3:00 PM
Ecovative Design, LLC	1113674	Emily	Carroll	SBIR Phase I: Gel-Assisted Casting of a Self-Assembling Biocomposite Material	Bob Lockwood	1:30 PM
EDalytics, LLC	1113692	Christy	McGuire	SBIR Phase I: weCompute Content Authoring System: Facilitating User-Created Content in an Intelligent Tutoring System	Tallam Nguti	2:30 PM
Electrochemical Materials, LLC	1113240	Wanli	Xu	SBIR Phase I: Engineered Solid Electrolyte Interphase Films for Silicon-Based Lithium Insertion Anodes	Sherry Hostetter	4:00 PM
Energizing Solutions, Inc.	1113998	Brian	Pepin	SBIR Phase I: Proposal for Research into Low-Cost Distributed Wireless Sensing of Operational Condition in Industrial Electric Motors	Terry McMahon	2:30 PM
EngeniusMicro, LLC	1112966	Brian	English	SBIR Phase I: Vibration Harvesting for High-Temperature Wireless Sensors	Sherry Hostetter	2:00 PM
Errcive, Inc.	1113652	Charles	Ramberg	SBIR Phase I: Low Cost Manufacturing of Pollution Control Substrates	Bob Lockwood	4:00 PM
Ferro Solutions, Inc.	1113641	Robert	O'Handley	SBIR Phase I: Magneto-electric-MEMs-enabled Wireless Power for Medical Implants	Carol Van Buren	1:00 PM
Flow Polymers, Inc.	1113330	Xiaofan	Luo	SBIR Phase I: Development of Novel Nanofillers for Tire Innerliners Based on an Advanced Manufacturing Process of Organically Functionalized Layered Double Hydroxides (LDHs)	Tallam Nguti	3:30 PM
Fyodor Biotechnologies, Inc.	1113394	Edwin	Agbo	SBIR Phase I: Novel Urine-excreted Plasmodium Falciparum and P. vivax Poly-asparagine Proteins as Targets for Bi-specific Monoclonal Antibody and Urine Malaria Test Development	Carol Van Buren	4:00 PM
Gate Fuels Incorporated	1113450	Xiaozhou	Zhang	SBIR Phase I: One-step Production of Lactic Acid from Lignocellulosic Biomass by Recombinant Cellulolytic Bacillus subtilis	Bob Lockwood	1:00 PM
GigaGen, Inc.	1111480	David	Johnson	SBIR Phase I: Multiplexed Single Cell Analysis	See Dawnbreaker to Register	
Ginkgo BioWorks	1113506	Joseph	Davis	SBIR Phase I: Novel Proteolysis-based Tools for Metabolic Engineering of Amino Acid Producing Strains	See Dawnbreaker to Register	
Glint Photonics, Inc.	1114079	Peter	Kozodoy	SBIR Phase I: Reactive Optics for Solar Concentrators	Sherry Hostetter	2:30 PM
Hermes Commerce, Inc.	1113888	Joshua	Cross	SBIR Phase I: Secure SMS Transactions for Transit Systems and Mobile Markets	See Dawnbreaker to Register	
Hummingbird Scientific, LLC	1114077	Daan Hein	Alsem	SBIR Phase I: In-situ Transmission Electron Microscope Microfluidic Specimen Holder with High Accuracy Environmental Monitoring and Control	See Dawnbreaker to Register	
Imaginary Lines, Inc.	1113287	Tam	O'Shaughnessy	SBIR Phase I: Deploying AR in K-12 Science Education	See Dawnbreaker to Register	
Inmatech, Inc.	1113564	Saemin	Choi	SBIR Phase I: High Power and Energy Density VN-based Asymmetric Supercapacitors	Terry McMahon	4:30 PM
InnoGenomics Technologies, LLC	1113447	Sudhir	Sinha	SBIR Phase I: Method for Genetic Detection Using Interspersed Genetic Elements	Carol Van Buren	2:00 PM
Itaconix	1113804	Jennifer	Durant	SBIR Phase I: Biocatalysts for the Production of Itaconinc Acid	Bob Lockwood	3:30 PM
Jianguo Xu Xunergy	1113100	Jianguo	Xu	SBIR Phase I: A Highly Efficient Thermally Activated Heat Pump for Heating/Cooling	Terry McMahon	2:00 PM
Khush, Inc.	1113681	Prerna	Gupta	SBIR Phase I: Realtime Automatic Accompaniment for Music Games	Tallam Nguti	1:30 PM
Lightwave Photonics, Inc.	1114008	Robert	Jorgenson	SBIR Phase I: Enhanced Reflectivity GEMM Materials for High-Efficiency and Low-Cost III-Nitride LED Technology	Carol Rabke	2:30 PM
Lymba Corporation	1113285	Christine	Nezda	SBIR Phase I: Hybrid Question Answering Combining a Search Index with an RDF Store	Carol Rabke	ALT

NSF CAP 1

SBIR/STTR Phase I Grantee Workshop

Larta Institute
connecting people to drive innovation

CONGRATULATIONS on your SBIR Phase I grant! Larta Institute's NSF-CAP1 is designed to assist you in preparing a superior and credible Commercialization Plan that fully addresses the topic areas identified by NSF as vital to SBIR Phase II reviews. The NSF-CAP1 will help position your company as a commercially-viable enterprise in today's competitive marketplace. This program includes personlaized mentoring, Industry connections, and interactive webinars.

Personalized Mentoring

Larta assigns dedicated Principal Advisors (PA) that will help you to develop a work plan based on your company's specific needs. Larta PAs have in average 15 years of business consulting commercialization experience, valuable connections with the investment and corporate communities, and many of them have successfully started their own business.

Industry Connections

We will introduce you to our unmatched, commercially relevant global network of industry connections with the purpose of developing valuable strategic alliances and obtaining constructive feedback on your business strategy.

Interactive Webinars

You will have the opportunity to participate in our interactive webinars that will help you to face topics related to common issues facing high-tech startups. These webinars will be hosted by key representatives of the Larta network from top firms worldwide.

One-on-One Meetings

Larta Institute will briefly meet with representatives from each of its assigned SBIR companies.

For specific information on the date, time and location for your meeting, please see the one-on-one meeting schedule available in this booklet.

Our meetings will take place:
Thursday, September 29
From 1:00pm to 5:00pm
Potomac 3/4

Please, visit our table in the registration area if you have any questions.

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Larta Institute

Advanced Materials - Agritech - Cleantech - IT/Electronics - Life Sciences

Larta provides commercialization assistance, innovation policy, and innovation event management services to leading U.S. agencies and regions around the world. Our clients fund breakthrough technology and nurture globally competitive enterprises.

Tangible results since 2005:

12 Acquisitions

$431 Million raised by 164 companies

95 R&D grant awards secured by Larta-mentored ventures

4.5 New jobs per company assisted

456 Strategic introductiones facilitated on an annual average

Commercialization Assistance Services

We provide business assistance and market linkages to emerging companies receiving public R&D grants to support the commercialization of new technologies.

Innovation Event Management

We showcase the latest developments in the innovation ecosystem by convening thought leaders, cutting-edge technologies and industry insiders.

Innovation Policy Consulting

We advise on the designof regional and national innovation initiatives as well as on the execution of programs that accelerate new and established technology enterprises in international markets.

Technology Transfer Services

We help bring university R&D rooted in industry needs out to the market by enhancing university-industry collaborations.

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Larta Institute: One-on-One Meeting Schedule

in alphabetical order by Company Name

Organization	Award #	PI First Name	PI Last Name	Title	Larta Rep	Larta One-on-One Meeting Time
ManyWheels, Inc.	1113171	Kevin	Dewalt	SBIR Phase I: ClaimAway Consumer Financial Health Care Portal	Rohit Shukla	3:30 PM
Marine Biomedical Technologies Inc.	1113138	Jai	Dwivedi	SBIR Phase I: Commercializing Cephalopod Aquaculture: Meeting The Demand	Rebecca Lauber	1:30 PM
MetalloSensors, Inc.	1113373	Weston	Judd	SBIR Phase I: Robust Molecular Sensors for Trace Mercury Detection	Rohit Shukla	2:30 PM
Metamagnetics, Inc.	1113687	Andrew	Daigle	SBIR Phase I: Ultra-low Profile Wideband Metamaterial Antennas Based upon Advanced Textured Ferrite Materials	Carlos Gutierrez	4:00 PM
Metiri Group	1113886	Jody	Britten	SBIR Phase I: Metiri Assessment Portal for 21st Century Learning (AP21)	Lizet Tirres	2:45 PM
Midwest Energy Group Incorporated	1106630	Rong	Jiang	SBIR Phase I: Novel Desulfur Processes for Producing Biodiesel from Grease Trap Waste	Rohit Shukla	1:45 PM
Mobile Green, Inc.	1113174	Matt	Secoske	SBIR Phase I: Mobile Green - Mobile Health Card	Carlos Gutierrez	1:00 PM
Molecular Templates, Inc.	1113315	Jack	Higgins	SBIR Phase I: Targeted Delivery of siRNA using Engineered Toxin Bodies	Rebecca Lauber	2:00 PM
Moore Research Enterprises, LLC	1113684	Brenda	Moore	SBIR Phase I: MIcrobial Modulation of Gastrointestinal Digestive Efficiency and Inflammation	Constanza Pachon	1:00 PM
MTPV, LLC	1113125	Jose	Borrego	SBIR Phase I: Epitaxially Grown GaSb Thin Films on GaAs Substrates For Near-Field Conversion of Heat to Electricity	Rebecca Lauber	4:15 PM
NanoHorizons Inc.	1113258	James	Delattre	SBIR Phase I: Antifouling Composites for Renewable Ocean Energy Applications	Rebecca Lauber	3:45 PM
Nanomaterial Innovation Ltd.	1113706	Yong	Min	SBIR Phase I: Low-cost and Resuable Functional Polyaniline for CO2 Sequestration and Fertilizer Production	Rohit Shukla	4:15 PM
Neyer, Tiseo & Hindo, Ltd.	1113525	Kraig	Warnemuende	SBIR Phase I: Next Generation Green Cement Technology	Rohit Shukla	2:15 PM
Nitek Incorporated	1113159	Seongmo	Hwang	SBIR Phase I: High Power, High Efficiency Micropixel Ultraviolet Light Emitting Lamp	Rohit Shukla	4:30 PM
Novophage Therapeutics, Inc.	1113071	Michael	Koeris	SBIR Phase I: Environmental Biofilm Decontamination and Enhanced Energy Efficiency with Engineered Phage	Rebecca Lauber	1:15 PM
Oceanit Laboratories Inc.	1113092	Venkat	Kamavaram	SBIR Phase I: Cellulosic Fuel Cell for Energy Generation	Lizet Tirres	2:00 PM
Oramic, LLC	1113574	Stephanos	Papademetriou	SBIR Phase I: Novel Thrombolysis Microcatheter System for the Clearing of Neurovascular Occlusions	Carlos Gutierrez	3:45 PM
Pacific Microchip Corp.	1113254	Denis	Zelenin	SBIR Phase I: 3D X-ray Imager	Constanza Pachon	4:00 PM
PaneraTech, Inc.	1113770	Yakup	Bayram	SBIR Phase I: Structural Imaging of High Temperature Furnace Walls	Rohit Shukla	1:30 PM
Persimmon Technologies Corporation	1113202	Martin	Hosek	SBIR Phase I: Spray-Formed Soft Magnetic Material for Efficient Hybrid-Field Electric Machines	Constanza Pachon	2:00 PM
Phage Biocontrol, LLC	1112969	Elizabeth	Summer	SBIR Phase I: Improvement of the Biofuel Fermentation Process by the Phage-mediated Reduction of Contaminating Lactic Acid Bacteria	Rebecca Lauber	2:30 PM
PLANT PV	1113709	Craig	Peters	SBIR Phase I: Transparent Conducting Nanofiber Composite Electrodes for High Efficiency Thin Film Tandem Solar Cells	Rohit Shukla	2:45 PM
Polyradiant Technology	1114047	Hailiang	Wang	SBIR Phase I: Silver Nanowire-Polymer Composite Transparent Electrodes	Carlos Gutierrez	4:30 PM
Powdermet, Inc.	1113288	Tiffany	Miller	SBIR Phase I: Nano-Aluminum Forgings for Lightweight Transportation Applications	Lizet Tirres	1:00 PM
Promethean Power Systems	1113206	Sorin	Grama	SBIR Phase I: Improved Cold Thermal Energy Storage for Refrigeration Applications	Lizet Tirres	3:30 PM
Proton Energy Systems, Inc.	1113495	Kathy	Ayers	SBIR Phase I: High Efficiency Electrochemical Compressor Cell to Enable Cost Effective Small-Scale Hydrogen Fuel Production and Recycling	Lizet Tirres	3:45 PM
QuantLogic Corporation	1113660	Deyang	Hou	SBIR Phase I: Developing an Adaptive Compact Fuel Reformer with an Ultra-Fine Homogenous Atomizer	Constanza Pachon	1:45 PM
RoadNarrows, LLC	1113964	Kim	Wheeler-Smith	SBIR Phase I: Scalable Computer Clusters Applied to Sensing and Control of Intelligent Manipulators for Agile Manufacturing	Carlos Gutierrez	2:15 PM
Rochal Industries, LLP	1110189	Joseph	Salamone	SBIR Phase I: Correlation of Surface Free Energy and Cytocompatibility of Amphiphilic Biomaterials	Rohit Shukla	1:00 PM
SAMDI Tech	1113312	Michael	Scholle	SBIR Phase I: A Label-Free Tool for High Throughput Drug Discovery	Constanza Pachon	3:45 PM

Larta Institute: One-on-One Meeting Schedule

in alphabetical order by Company Name

Organization	Award #	PI First Name	PI Last Name	Title	Larta Rep	Larta One-on-One Meeting Time
Second Avenue Software, Inc.	1113493	Victoria	VanVoorhis	SBIR Phase I: Martha Madison's Marvelous Machines	Lizet Tirres	2:15 PM
SmalTec, International	1112957	Jonathan	Montgomery	SBIR Phase I: Integrating Electrical Discharge Non-Contact Measurement into Manufacturing Platforms for Precision On-Board Metrology	Constanza Pachon	1:15 PM
Strategic Polymer Sciences, Inc.	1113625	Shihai	Zhang	SBIR Phase I: Unconventional Low Cost Production of High Performance Electroactive Polymers	Rebecca Lauber	4:30 PM
Sustainable Innovations, LLC	1113189	Trent	Molter	SBIR Phase I: Efficient Separation of Hydrogen From Reformate	Rebecca Lauber	3:30 PM
Swamp Optics, LLC	1113561	Dongjoo	Lee	SBIR Phase I: Simple Device for Measuring Nanosecond Laser Pulses	Carlos Gutierrez	2:00 PM
Symbios Technologies, LLC	1113110	Mandar	Sunthankar	SBIR Phase I: Advancing a Novel Low-voltage Electric Arc Method to Oxidize Organic Material in Contaminated Water	Carlos Gutierrez	2:45 PM
Telineage, Inc.	1113793	Vijay	Balasubramaniyan	SBIR Phase I: A Robust Caller-ID Alternative for Securing Telephony Based Transactions	Lizet Tirres	4:15 PM
TerViva BioEnergy Inc	1112926	Claire	Kinlaw	SBIR Phase I: SNP Discovery to Identify Candidate Genes for Association Genetics in "Pongamia pinnata", a High-Potential Biodiesel Feedstock	Constanza Pachon	2:30 PM
The Laser Sensing Company	1113289	Stephen	So	SBIR Phase I: Towards Precision Ultra-Portable 13C/12C CO2 Atmospheric Isotopic Ratio Monitors Using Quantum Cascade Laser Spectroscopy	Carlos Gutierrez	1:30 PM
TheraJect	1113885	Seajin	Oh	SBIR Phase I: Dissolvable Microneedle Study for Migraine Therapy	Lizet Tirres	1:45 PM
Torrey Hills Technologies, LLC	1112885	Lai	Qi	SBIR Phase I: Capture and Use of Coal Mine Ventilation Air Methane (VAM)	Constanza Pachon	3:30 PM
Transmed Systems, Inc.	1113336	Jeremy	Miller	SBIR Phase I: Efficient Comparative Effective Research Tools In Real Time Environment	Constanza Pachon	2:15 PM
Trillium FiberFuels, Inc.	1112582	Stephen	Potochnik	SBIR Phase I: Xylose Isomerase from Marine Bacteria for Cellulosic Ethanol	Rebecca Lauber	2:45 PM
Triune Systems	1113400	Wayne	Chen	SBIR Phase I: Micro-Solar Powered Battery Charger Circuit	Lizet Tirres	4:00 PM
Tymora Analytical Operations, LLC	1113085	Anton	Iliuk	SBIR Phase I: Development of Novel Dendrimer-based Technologies for Phosphorylation Analyses	Carlos Gutierrez	1:15 PM
United Science, LLC	1113251	Chunze	Lai	SBIR Phase I: In situ PFC Monitoring Sensors	Carlos Gutierrez	4:15 PM
Variance Dynamical Corporation	1114110	Andreas	Tziolas	SBIR Phase I: Novel Method for Direct Frequency Component Decomposition: Electronic Neural Loops (ENLs)	Carlos Gutierrez	2:30 PM
VariWaves	1113508	John	Kountouriotis	SBIR Phase I: Electrically Reconfigurable Antennas for Wireless Local Area Networks	Constanza Pachon	4:30 PM
Ward Process dba American Acoustical Products	1113541	Peter	Jackson	SBIR Phase I: Realizing Broadband Frequency Sound Absorption in Micro-Slit Panels	Lizet Tirres	1:30 PM
Wasatch Photonics, Inc.	1112990	William	Brown	SBIR Phase I: High-speed Low-cost Spectral Domain Optical Coherence Tomography System for Intravascular Imaging Applications	Rohit Shukla	4:00 PM
XRSciences, LLC	1113913	Colin	Charette	SBIR Phase I: Laminography-based X-ray Security System for Aviation Security	Rohit Shukla	1:15 PM
Xunlight 26 Solar, LLC	1113818	Alvin	Compaan	SBIR Phase I: Advanced Semitransparent CdTe PV	Rebecca Lauber	1:45 PM

National Science Foundation
Staff Bios

Prakash Balan joined the SBIR/STTR Program at NSF as a Program Director in February 2011 with a focus on novel chemical technologies and processes. He has over 15 years of broad experience spanning R&D, new technology development and commercialization in both large and small entrepreneurial company environments. After a career with ARCO Chemical and Lyondell Chemical Company where he helped commercialize several chemical technologies and was granted technology achievement awards for his significant contributions, he co-founded two successful companies, first an environmental engineering technology company and thereafter a biofuels company. These companies served to commercialize his patents related to industrial multiphase reactors applicable to chemical and biochemical production, as well as energy efficient patented oxygenation technologies for biological wastewater treatment. In wastewater treatment, an estimated 200 million gallons per day of US municipal wastewater is currently being treated using his technology achieving 20-30% energy efficiency improvements in each installation. This represents the fruits of technology commercialized over a span of 7 years. In the biofuels arena, he led the development and design of proprietary process technology and commissioned a chemical plant with capacity to produce 10-15 million gallon per year of biodiesel from waste oils and animal fats. Prakash holds a Ph.D. in Chemical Engineering from the Pennsylvania State University.

Greg Baxter has been a Program Director for the SBIR/STTR Program at the National Science Foundation since September of 2008, and serves as the outgoing Cluster Leader for the Biotechnology and Chemical Technologies (BC) Cluster in SBIR/STTR. Prior to joining NSF, Greg was founder and CSO of Hurel Corporation, a biotechnology company developing cell-based microfluidic biochips for drug discovery and development applications. Greg is an Adjunct Associate Professor with the Department of Biomedical Engineering at Cornell University. Prior to Hurel, Greg was a Senior Scientist at the Cornell Nanoscale Science and Technology Facility and the Biotechnology Liaison for the National Nanofabrication Users Network. Prior to Cornell, he held various research positions at Molecular Devices Corporation. Greg received his Ph.D. in molecular biology and biochemistry from the University of California at Santa Barbara and did his postdoctoral research at Syntex Research. Unfortunately, Greg is departing NSF at the end of September to return to California and this will be his last event with SBIR.

Joshua Chamot has been in the NSF Office of Legislative and Public Affairs since 2001 where he has served as both the Media Officer for Engineering and the Media Officer for Mathematics and Physical Sciences following a position as a general writer-editor and speechwriter. Prior to his term at NSF, Josh served as a Public Affairs Assistant at the Smithsonian National Museum of Natural History, a writing-editing consultant for the Temple University Institute for Survey Research and as a freelance science writer. His articles have appeared in a number of print and online publications including *Geotimes* and *Space.com*. He received his B.S. in Geology from the College of William and Mary in 1998 and his M.S. in Geology from the University of Tennessee at Knoxville in 2000.

Juan Figueroa joined NSF in July 2002 as a Program Manager in the SBIR/STTR Program after spending over twenty years in R&D management positions in the electronics and communications industries. Juan is responsible for proposals and grants in the area of scientific instrumentation, optoelectronics, and micro-electro-mechanical systems (MEMS) within the Information & Communications Technology (IC) Cluster. His last position before joining NSF was Product Development Consultant for Material Sensing and Instrumentation, Inc. (MSI), an SBIR participant company. Prior to MSI, Juan was Director of Strategic Development and Project Management for the Home Communications Division of Ericsson, a multinational telecommunications and consumer electronics company. His first appointment after graduate school was with Bell Laboratories as a Member of the Technical Staff in Murray Hill, New Jersey and Allentown, Pennsylvania working in the development of microprocessor, CMOS and networking technologies. After 13 years with Bell Labs, Juan led the operations of a high-speed networking equipment design startup company. Juan received his Ph.D. in Physics from the State University of New York at Binghamton. A native of Puerto Rico, he received his B.S in Physics from the University of Puerto Rico.

Monte Fisher is Senior Counsel for Investigations within the Office of Inspector General at NSF. He earned a Bachelor of Arts in Chemistry and Computer Science from New College, a Ph.D. in Organic Chemistry from the University of Texas at Austin, and a J.D. from Columbia Law School. He clerked for a judge on the U.S. Court of Appeals for the Federal Circuit, worked for a private law firm for 3 years, and then joined the National Science Foundation's Office of Inspector General in 1990.

Jamie French joined the National Science Foundation in November 2007 as Lead Grants and Agreements Specialist for the Division of Grants and Agreements (DGA). Jamie is the DGA Team Lead for NSF's Engineering Directorate and Office of Polar Programs. Prior to NSF, Jamie worked as a Senior Policy Analyst for the U.S. Department of Justice, Office of Community Oriented Policing Services, where she managed a program providing grant assistance to state, local, and tribal law enforcement agencies. She began her career at DOJ with the Federal Bureau of Prisons, where she was an assistant on a national study of drug treatment programs in federal prisons. Jamie received a B.A. in Psychology and M.A. in Counseling from West Virginia University.

Joseph Hennessey serves as Senior Advisor in the Industrial Innovation and Partnerships Division within the Directorate for Engineering. He has also held placements as Acting Director for IIP, Program Director for SBIR, Program Director for the Management of Technological Innovation (MOTI) program, and as Acting Deputy Assistant Director for ENG. Joe came to NSF in June 1996 after retiring as Vice President and Director, Innovation at Armstrong World Industries. Armstrong is a $3 billion global company recognized as a world leader in interior furnishings. During his 27 years at Armstrong, he led global innovation organizations, identified and leveraged technologies into commercially successful new products and designed multi-functional organizations consistent with global strategies. Joe received his Ph.D. in Organic Chemistry from the University of Maryland and is a member of the Industrial Research Institute (IRI), the Center for Innovation Management Studies (CIMS) at North Carolina State University, and a trustee of Millersville University.

Glenn Larsen joined the National Science Foundation in 1987 as the computer systems engineer for NSF's Directorate for Engineering. In 2005, he became program director for the Industry/University Cooperative Research Center's (IUCRC) Fundamental Research program and in 2010 joined the SBIR program as Program Director for the Education Applications (EA) Cluster. His entrepreneurial experience includes developing subdivisions, new home construction, manufacturing computers, and custom programming for specific industry applications. His professional certifications include the Project Management Professional (PMP) and Microsoft Certified Systems Engineer (MCSE) and his degrees include the Ph.D. and MBA. He has authored several books on computer graphics and

computer operating systems with sales exceeding 300,000 copies that have been published and translated into five different languages.

Bruce McKinnon currently serves as a Systems Analyst for the FastLane/eBusiness team. He has been with FastLane and NSF for 4 years and brings with him over ten years of customer service experience.

Amanda Morris is the IIP support contract Program Manager with EDJ Associates, Inc. Amanda and her staff provide on-site support services to the SBIR/STTR and Partnership Programs in all administrative and technical areas, including screening proposals for compliance with the solicitations, creating panels and recruiting reviewers for Phase I and Phase II, assisting with panelist travel/reimbursement, records management, IT/database support, and meeting planning. Amanda is the primary point of contact and organizer for the NSF SBIR/STTR Phase I and Phase II Grantees Conferences. She has been at NSF since 2006 and has a background in operations and federal grants management. Prior to joining NSF, she was the Director of Operations for Science at a conservation non-profit organization. She earned her M.A. in Asian Studies and International Relations from George Washington University and her B.A. in Political Science from North Carolina State University.

Murali S. Nair is the Cluster Leader for the Information and Communications Technology (IC) Cluster with the SBIR/STTR Program, and leads the Innovation Accelerator (IA) program that assists the commercialization efforts of Phase II grantees. Prior to joining NSF, he was the Founder CEO of a Bluetooth wireless product company. In this capacity, he raised equity capital for worldwide operations in the U.S., China and India. He designed, planned and implemented the product development cycle, and managed the marketing strategy, strategic alliances and business development processes. Before that, Murali was a Senior Systems Engineer at L-3 Communications where he provided strategic advice to the Executive VP for a complete re-plan of the Hughes contract for real-time, embedded ground control software for the $350M PANAMSAT communications satellite. Prior to joining L-3 Communications, he was a Mission Planner at Motorola Iridium where he was involved in all aspects of satellite operations including orbit determination, generating guidance targets and orbital slot placement. Before joining Iridium, Murali was a faculty member at Embry-Riddle Aeronautical University, where he developed an entire Space Systems Design Lab from concept inception to fully operational mode and national prominence, and supervised five (5) space system designs, three (3) of which were winners in the National AIAA/Loral Design Competition. He is a recipient of a number of awards including NSF's second highest award for meritorious service and the President's Innovation Award for Space Systems Design courses. Murali is a graduate of the Indian Institute of Technology and the University of Texas, and is a registered professional engineer in the State of Florida.

Willie Mae Powell is a Financial Review and Cost Analyst, Division of Institution and Award Support (DIAS), within the Foundation's Office of Budget, Finance, and Award Management (BFA). Since joining DIAS in July 2004, her responsibilities have included the conduct of pre-award reviews, negotiation of indirect cost rates, resolution of audit findings, and site visits under the Award Monitoring and Business Assistance Program. Mae began her career at NSF in March 2001. Immediately prior to assuming her current position, she served as a Management and Program Analyst and Administrative Manager in CAAR which was then a part of BFA's former Division of Acquisition and Cost Support. Before that, she was a Grant and Contract Technician within CAAR. Mae earned an Associate Degree in Applied Science from Central Texas College in 1996 and a B.A. in Business Administration from Averett University in December 2003. After graduating high school, Mae served four years as an Ammunition Technician within the United States Marine Corps.

Ben Schrag joined the National Science Foundation as a Program Director in the areas of advanced materials and nanotechnology in May 2009. Prior to this, he served for four years as Director of

Research and Development at Micro Magnetics, where he led a development effort to commercialize a new family of high-performance magnetic microsensor products for demanding consumer and military applications. Before this, he served as manager of the metrology group at Micro Magnetics, directing an engineering team developing a new magnetic diagnostic system for failure analysis and fault isolation in semiconductor devices. During this time, Ben also served as a visiting scientist at Brown University and as the Principal Investigator on a number of federal grants and contracts, including NSF Phase I and Phase II Small Business Innovation Research projects and an Advanced Technology Program award from NIST. He received his B.A. in Physics from Reed College, and his M.S. and Ph.D. in Physics from Brown University.

Ruth Shuman joined the National Science Foundation in August 2009. She is currently serving as Program Director for the Biology and Chemical Technologies (BC) Cluster in the SBIR/STTR Program, and was recently named Cluster Leader. Formerly, she was the founder, president, and CEO of a successful venture-backed life science company, Gentra Systems, Inc., that developed, manufactured, and sold products for genetic testing and research to clinical and research laboratories worldwide. Following Gentra's acquisition, she held various consulting/advisory positions with start-up companies, and was CEO-In-Residence for Life Science with the University of Minnesota's Venture Center evaluating the business potential of University-developed technology. Ruth began her career as a faculty member at North Carolina State University and was a pioneer in the development of gene transfer and genetic engineering technology. She holds a Ph.D. from the University of Minnesota in the area of Genetics and Cell Biology.

Anthony (Tony) Walters is an Operations Research analyst with training and experience in simulation, mathematical modeling, statistical analysis, and risk assessment. Early on, his experience in simulation and mathematical modeling provided an entry into the then underdeveloped field of air quality modeling in the late 1960s and early 1970s. This experience with air quality and environmental oversight led to the assessment and management of environmental liability and risk in all media (air, soil, groundwater, and surface water runoff), the design of compliance strategies for health and environmental regulations, and hazardous waste resolution strategies. Tony taught at the graduate level for over nine years, worked with a large trade association for six years, operated his own company for more than 15 years, and worked with other small and large consulting firms for more than eight years. He successfully dealt with issues including regulatory compliance, development of automated models, process redesign for increased cost-effectiveness, policy development, and regulatory response. Tony first worked at the NSF in 2002 and his service includes experience in the SBIR Program, the Partnerships for Innovation (PFI) Program, and the EPSCoR Program. Currently, he is an SBIR Program Director in the Biotechnology & Chemical Technologies (BC) Cluster and handles environmental, bio-energy, bio-fuels, and engine component proposals and questions. Tony holds a Bachelor's degree in mathematics, a Master's in engineering sciences, and an interdisciplinary Ph.D. in computer science, mathematics, and quantitative methods of business.

Grace Wang joined National Science Foundation in June 2009. Grace is a Program Director for SBIR/STTR program, focusing on Nanotechnology and Advanced Materials. Prior to joining NSF, she was a Senior Development Scientist and project leader at Hitachi, where she has led the team efforts to develop and introduce a few generations of products into the market. Prior to Hitachi, she was an Advisory Development Scientist at IBM, where she has established a nano-tribology research laboratory from scratch. Grace has received many technical and leadership awards from both IBM and Hitachi. Grace holds a Ph.D. in Materials Science and Engineering from Northwestern University.

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National Science Foundation: One-on-One Meeting Schedule

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Organization	Award #	PI First Name	PI Last Name	Title	NSF Program Director	NSF One-on-One Meeting Time
Abeam Technologies	1113135	Christophe	Peroz	SBIR Phase I: Holographic Laser: High-Brightness, High-Power Laser Diode	Juan E. Figueroa	4:15 PM
Absorbent Materials Company, LLC	1113260	Hanbae	Yang	SBIR Phase I: Development of Physico-Chemically & Biologically Activated Swelling Organosilica-Metal Composites Filter Media in Bioretention Systems for Enhanced Remediation of Ur	Prakash Balan	1:30 PM
Acoustic Biosystems, Inc.	1113300	Reza	Shekarriz	SBIR Phase I: Resonant Acoustic Cell Enrichment (RACE) Technique for Rare Cell Detection in Blood	Ruth M. Shuman	4:00 PM
Akron Air Materials, LLC	1113370	Dennis	Townsend	SBIR Phase I: Development of Integrated Oil Debris Sensors for Machinery Fault Detection and Conditioning Monitoring	Muralidharan S. Nair	2:00 PM
Alpha Universe, LLC	1113377	Alexey	Zdanovsky	SBIR Phase I: Inexpensive and Effecient System for Signal Amplification	Ruth M. Shuman	3:45 PM
Aluminastic Corporation	1113469	Matthew	Blankenhorn	SBIR Phase I: Novel Casting Process for Developing a Carbon Modified Hyper-Eutectic Aluminum-Silicon Alloy for Forging Wear Resistant Parts	Grace Jinliu Wang	1:00 PM
ANDalyze	1113908	Debapriya	Mazumdar	SBIR Phase I: Dip-stick Tests for Detection of Heavy Metals in Water	Anthony Walters	2:00 PM
Applied Nanostructures, Inc.	1113523	Ami	Chand	SBIR Phase I: Integrated Thermal Scanning Probe Development	Ben Schrag	2:30 PM
ApprenNet, LLC	1113008	Karl	Okamoto	SBIR Phase I: Crowd Sourcing Apprenticeship Learning: A Web Platform for Teaching Entrepreneurial Lawyering	Glenn H. Larsen	1:15 PM
Arbor Photonics	1113631	Michelle	Stock	SBIR Phase I: Cost-Effective, High Volume Emitter Wrap Through Manufacturing Process Development for Higher Efficiency Crystalline Silicon Solar Cells	Grace Jinliu Wang	1:45 PM
armONx	1112165	Kevin	Robinson	SBIR Phase I: Low-Cost Photocatalytic Treatment to Seal Existing Concrete, Stone, Masonry or Other Cementitious Surfaces and Make Them Self-Cleaning	Ben Schrag	2:15 PM
Artaic, LLC	1113606	Edward	Acworth	SBIR Phase I: High-Throughput Agile Robotic Manufacturing System for Tile Mosaics	Muralidharan S. Nair	2:15 PM
Arzeda Corporation	1114078	Alexandre	Zanghellini	SBIR Phase I: High-yield Fermentation of Sugars to Levulinic Acid	Prakash Balan	1:00 PM
Ascentia Imaging, Inc.	1112908	Gregory	Johnson	SBIR Phase I:Metrology for Precision Machining	Juan E. Figueroa	1:00 PM
ATSP Innovations, LLC	1113825	James	Economy	SBIR Phase I: Ultra-Low Wear Coatings Based on a Novel Family of Aromatic Thermosetting Copolyesters	Grace Jinliu Wang	3:30 PM
BioHeatMap, Inc.	1114059	Robert	Meadows	SBIR Phase I: Data Integration and Analysis for the Pharmaceutical Industry	Juan E. Figueroa	3:30 PM
Bioremediation Consulting, Inc.	1113457	Margaret	Findlay	SBIR Phase I: Development of a Commercial Culture of Dehalococcoides for Anaerobic Treatment of PCB's	Anthony Walters	4:00 PM
Cadence Fluidics Company	1113588	Neil	Picha	SBIR Phase I: Fluidic Processor	Ruth M. Shuman	2:45 PM
CatheNect Medical, Inc.	1114081	Julia	Rasooly	SBIR Phase I: Novel Peritoneal Dialysis Catheter to Reduce Infections	Ruth M. Shuman	1:00 PM
Ceralink Inc.	1113635	Shawn	Allan	SBIR Phase I: Microwave Heating of Reaction-Bonded Silicon Carbide Ceramics	Ben Schrag	1:30 PM
Chembionics, Inc.	1113303	Harry	Jabs	SBIR Phase I: Novel Mechanisms for Non-rotational Wind Energy Conversion	Muralidharan S. Nair	4:15 PM
Civionics, LLC	1113466	Andrew	Zimmerman	SBIR Phase I: A Multifunctional Piezoelectric Smart Flooring System for Energy Efficient Control in Commercial Building Systems	Muralidharan S. Nair	3:30 PM
ClearEdge3D	1113653	Kevin	Williams	SBIR Phase I: Novel Algorithms for Automated 3D Building Models and 3D Street Maps	Glenn H. Larsen	3:30 PM
Community Knowledgebase, LLC	1113297	Lewis	Friedland	SBIR Phase I: Building an Integrated Software Platform for Civic Epistemic Gaming	Glenn H. Larsen	1:45 PM
CU Aerospace, LLC	1113365	David	Carroll	SBIR Phase I: MatLab Based Toolbox for Promoting Engineering Education of L1 Adaptive Control Theory	Glenn H. Larsen	2:30 PM
Deton Corp.	1113148	Patrick	Sislian	SBIR Phase I: Cough Analyzer of Airborne Bacteria for Tuberculosis Diagnosis	Ruth M. Shuman	2:15 PM
Diani Systems, LLC	1113090	Gary	Sugar	SBIR Phase I: High Resolution Channel Sounding for Indoor TDOA Positioning Using Narrowband RF Transceiver	Glenn H. Larsen	2:00 PM
Dynaflow, Inc.	1113384	Greg	Loraine	SBIR Phase I: Extraction of Lipids from Algal and Collection by Foam Fractionation	Prakash Balan	4:30 PM

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Organization	Award #	PI First Name	PI Last Name	Title	NSF Program Director	NSF One-on-One Meeting Time
E2E Materials, Inc.	1113577	Robert	Rasmussen	SBIR Phase I: Multi-Use Moisture Resistant Green Composites	Ben Schrag	2:00 PM
Ecovative Design, LLC	1113674	Emily	Carroll	SBIR Phase I: Gel-Assisted Casting of a Self-Assembling Biocomposite Material	Ben Schrag	3:30 PM
EDalytics, LLC	1113692	Christy	McGuire	SBIR Phase I: weCompute Content Authoring System: Facilitating User-Created Content in an Intelligent Tutoring System	Glenn H. Larsen	1:30 PM
Electrochemical Materials, LLC	1113240	Wanli	Xu	SBIR Phase I: Engineered Solid Electrolyte Interphase Films for Silicon-Based Lithium Insertion Anodes	Prakash Balan	3:30 PM
Energizing Solutions, Inc.	1113998	Brian	Pepin	SBIR Phase I: Proposal for Research into Low-Cost Distributed Wireless Sensing of Operational Condition in Industrial Electric Motors	Muralidharan S. Nair	3:45 PM
EngeniusMicro, LLC	1112966	Brian	English	SBIR Phase I: Vibration Harvesting for High-Temperature Wireless Sensors	Juan E. Figueroa	1:30 PM
Errcive, Inc.	1113652	Charles	Ramberg	SBIR Phase I: Low Cost Manufacturing of Pollution Control Substrates	Anthony Walters	3:30 PM
Ferro Solutions, Inc.	1113641	Robert	O'Handley	SBIR Phase I: Magneto-electric-MEMs-enabled Wireless Power for Medical Implants	Juan E. Figueroa	3:45 PM
Flow Polymers, Inc.	1113330	Xiaofan	Luo	SBIR Phase I: Development of Novel Nanofillers for Tire Innerliners Based on an Advanced Manufacturing Process of Organically Functionalized Layered Double Hydroxides (LDHs)	Grace Jinliu Wang	2:45 PM
Fyodor Biotechnologies, Inc.	1113394	Edwin	Agbo	SBIR Phase I: Novel Urine-excreted Plasmodium Falciparum and P. vivax Poly-asparagine Proteins as Targets for Bi-specific Monoclonal Antibody and Urine Malaria Test Development	Ruth M. Shuman	3:30 PM
Gate Fuels Incorporated	1113450	Xiaozhou	Zhang	SBIR Phase I: One-step Production of Lactic Acid from Lignocellulosic Biomass by Recombinant Cellulolytic Bacillus subtilis	Prakash Balan	1:45 PM
GigaGen, Inc.	1111480	David	Johnson	SBIR Phase I: Multiplexed Single Cell Analysis	Ruth M. Shuman	1:45 PM
Ginkgo BioWorks	1113506	Joseph	Davis	SBIR Phase I: Novel Proteolysis-based Tools for Metabolic Engineering of Amino Acid Producing Strains	Ruth M. Shuman	2:30 PM
Glint Photonics, Inc.	1114079	Peter	Kozodoy	SBIR Phase I: Reactive Optics for Solar Concentrators	Juan E. Figueroa	1:45 PM
Hermes Commerce, Inc.	1113888	Joshua	Cross	SBIR Phase I: Secure SMS Transactions for Transit Systems and Mobile Markets	Juan E. Figueroa	1:15 PM
Hummingbird Scientific, LLC	1114077	Daan Hein	Alsem	SBIR Phase I: In-situ Transmission Electron Microscope Microfluidic Specimen Holder with High Accuracy Environmental Monitoring and Control	Ben Schrag	3:45 PM
Imaginary Lines, Inc.	1113287	Tam	O'Shaughnessy	SBIR Phase I: Deploying AR in K-12 Science Education	Glenn H. Larsen	4:00 PM
Inmatech, Inc.	1113564	Saemin	Choi	SBIR Phase I: High Power and Energy Density VN-based Asymmetric Supercapacitors	Prakash Balan	3:45 PM
InnoGenomics Technologies, LLC	1113447	Sudhir	Sinha	SBIR Phase I: Method for Genetic Detection Using Interspersed Genetic Elements	Ruth M. Shuman	1:15 PM
Itaconix	1113804	Jennifer	Durant	SBIR Phase I: Biocatalysts for the Production of Itaconinc Acid	Prakash Balan	4:15 PM
Jianguo Xu Xunergy	1113100	Jianguo	Xu	SBIR Phase I: A Highly Efficient Thermally Activated Heat Pump for Heating/Cooling	Anthony Walters	1:30 PM
Khush, Inc.	1113681	Prerna	Gupta	SBIR Phase I: Realtime Automatic Accompaniment for Music Games	Glenn H. Larsen	1:00 PM
Lightwave Photonics, Inc.	1114008	Robert	Jorgenson	SBIR Phase I: Enhanced Reflectivity GEMM Materials for High-Efficiency and Low-Cost III-Nitride LED Technology	Ben Schrag	1:15 PM
Lymba Corporation	1113285	Christine	Nezda	SBIR Phase I: Hybrid Question Answering Combining a Search Index with an RDF Store	Muralidharan S. Nair	1:15 PM
ManyWheels, Inc.	1113171	Kevin	Dewalt	SBIR Phase I: ClaimAway Consumer Financial Health Care Portal	Juan E. Figueroa	2:15 PM
Marine Biomedical Technologies Inc.	1113138	Jai	Dwivedi	SBIR Phase I: Commercializing Cephalopod Aquaculture: Meeting The Demand	Gregory T. Baxter	1:00 PM
MetalloSensors, Inc.	1113373	Yanke	Che	SBIR Phase I: Robust Molecular Sensors for Trace Mercury Detection	Gregory T. Baxter	2:00 PM

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Metamagnetics, Inc.	1113687	Andrew	Daigle	SBIR Phase I: Ultra-low Profile Wideband Metamaterial Antennas Based upon Advanced Textured Ferrite Materials	Juan E. Figueroa	4:30 PM
Metiri Group	1113886	Jody	Britten	SBIR Phase I: Metiri Assessment Portal for 21st Century Learning (AP21)	Glenn H. Larsen	2:15 PM
Midwest Energy Group Incorporated	1106630	Rong	Jiang	SBIR Phase I: Novel Desulfur Processes for Producing Biodiesel from Grease Trap Waste	Prakash Balan	1:15 PM
Mobile Green, Inc.	1113174	Matt	Secoske	SBIR Phase I: Mobile Green - Mobile Health Card	Muralidharan S. Nair	1:30 PM
Molecular Templates, Inc.	1113315	Jack	Higgins	SBIR Phase I: Targeted Delivery of siRNA using Engineered Toxin Bodies	Gregory T. Baxter	2:30 PM
Moore Research Enterprises, LLC	1113684	Brenda	Moore	SBIR Phase I: MIcrobial Modulation of Gastrointestinal Digestive Efficiency and Inflammation	Gregory T. Baxter	1:30 PM
MTPV, LLC	1113125	Jose	Borrego	SBIR Phase I: Epitaxially Grown GaSb Thin Films on GaAs Substrates For Near-Field Conversion of Heat to Electricity	Grace Jinliu Wang	3:45 PM
NanoHorizons Inc.	1113258	James	Delattre	SBIR Phase I: Antifouling Composites for Renewable Ocean Energy Applications	Grace Jinliu Wang	2:00 PM
Nanomaterial Innovation Ltd.	1113706	Yong	Min	SBIR Phase I: Low-cost and Resuable Functional Polyaniline for CO2 Sequestration and Fertilizer Production	Prakash Balan	4:45 PM
Neyer, Tiseo & Hindo, Ltd.	1113525	Kraig	Warnemuende	SBIR Phase I: Next Generation Green Cement Technology	Ben Schrag	2:45 PM
Nitek Incorporated	1113159	Seongmo	Hwang	SBIR Phase I: High Power, High Efficiency Micropixel Ultraviolet Light Emitting Lamp	Juan E. Figueroa	4:00 PM
Novophage Therapeutics, Inc.	1113071	Michael	Koeris	SBIR Phase I: Environmental Biofilm Decontamination and Enhanced Energy Efficiency with Engineered Phage	Anthony Walters	1:45 PM
Oceanit Laboratories Inc.	1113092	Venkat	Kamavaram	SBIR Phase I: Cellulosic Fuel Cell for Energy Generation	Anthony Walters	2:30 PM
Oramic, LLC	1113574	Stephanos	Papademetriou	SBIR Phase I: Novel Thrombolysis Microcatheter System for the Clearing of Neurovascular Occlusions	Ruth M. Shuman	4:15 PM
Pacific Microchip Corp.	1113254	Denis	Zelenin	SBIR Phase I: 3D X-ray Imager	Muralidharan S. Nair	4:30 PM
PaneraTech, Inc.	1113770	Yakup	Bayram	SBIR Phase I: Structural Imaging of High Temperature Furnace Walls	Muralidharan S. Nair	1:00 PM
Persimmon Technologies Corporation	1113202	Martin	Hosek	SBIR Phase I: Spray-Formed Soft Magnetic Material for Efficient Hybrid-Field Electric Machines	Grace Jinliu Wang	2:30 PM
Phage Biocontrol, LLC	1112969	Elizabeth	Summer	SBIR Phase I: Improvement of the Biofuel Fermentation Process by the Phage-mediated Reduction of Contaminating Lactic Acid Bacteria	Prakash Balan	2:00 PM
PLANT PV	1113709	Craig	Peters	SBIR Phase I: Transparent Conducting Nanofiber Composite Electrodes for High Efficiency Thin Film Tandem Solar Cells	Grace Jinliu Wang	2:15 PM
Polyradiant Technology	1114047	Hailiang	Wang	SBIR Phase I: Silver Nanowire-Polymer Composite Transparent Electrodes	Grace Jinliu Wang	4:00 PM
Powdermet, Inc.	1113288	Tiffany	Miller	SBIR Phase I: Nano-Aluminum Forgings for Lightweight Transportation Applications	Grace Jinliu Wang	1:30 PM
Promethean Power Systems	1113206	Sorin	Grama	SBIR Phase I: Improved Cold Thermal Energy Storage for Refrigeration Applications	Muralidharan S. Nair	2:30 PM
Proton Energy Systems, Inc.	1113495	Kathy	Ayers	SBIR Phase I: High Efficiency Electrochemical Compressor Cell to Enable Cost Effective Small-Scale Hydrogen Fuel Production and Recycling	Prakash Balan	2:30 PM
QuantLogic Corporation	1113660	Deyang	Hou	SBIR Phase I: Developing an Adaptive Compact Fuel Reformer with an Ultra-Fine Homogenous Atomizer	Anthony Walters	1:15 PM
RoadNarrows, LLC	1113964	Kim	Wheeler-Smith	SBIR Phase I: Scalable Computer Clusters Applied to Sensing and Control of Intelligent Manipulators for Agile Manufacturing	Muralidharan S. Nair	2:45 PM
Rochal Industries, LLP	1110189	Joseph	Salamone	SBIR Phase I: Correlation of Surface Free Energy and Cytocompatibility of Amphiphilic Biomaterials	Ruth M. Shuman	1:30 PM
SAMDI Tech	1113312	Michael	Scholle	SBIR Phase I: A Label-Free Tool for High Throughput Drug Discovery	Gregory T. Baxter	2:15 PM
Second Avenue Software, Inc.	1113493	Victoria	VanVoorhis	SBIR Phase I: Martha Madison's Marvelous Machines	Glenn H. Larsen	2:45 PM

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SmalTec, International	1112957	Jonathan	Montgomery	SBIR Phase I: Integrating Electrical Discharge Non-Contact Measurement into Manufacturing Platforms for Precision On-Board Metrology	Ben Schrag	1:45 PM
Strategic Polymer Sciences, Inc.	1113625	Shihai	Zhang	SBIR Phase I: Unconventional Low Cost Production of High Performance Electroactive Polymers	Prakash Balan	4:00 PM
Sustainable Innovations, LLC	1113189	Trent	Molter	SBIR Phase I: Efficient Separation of Hydrogen From Reformate	Prakash Balan	2:45 PM
Swamp Optics, LLC	1113561	Dongjoo	Lee	SBIR Phase I: Simple Device for Measuring Nanosecond Laser Pulses	Juan E. Figueroa	2:30 PM
Symbios Technologies, LLC	1113110	Mandar	Sunthankar	SBIR Phase I: Advancing a Novel Low-voltage Electric Arc Method to Oxidize Organic Material in Contaminated Water	Anthony Walters	2:15 PM
Telineage, Inc.	1113793	Vijay	Balasubramaniyan	SBIR Phase I: A Robust Caller-ID Alternative for Securing Telephony Based Transactions	Glenn H. Larsen	3:45 PM
TerViva BioEnergy Inc	1112926	Claire	Kinlaw	SBIR Phase I: SNP Discovery to Identify Candidate Genes for Association Genetics in "Pongamia pinnata", a High-Potential Biodiesel Feedstock	Ruth M. Shuman	2:00 PM
The Laser Sensing Company	1113289	Stephen	So	SBIR Phase I: Towards Precision Ultra-Portable 13C/12C CO2 Atmospheric Isotopic Ratio Monitors Using Quantum Cascade Laser Spectroscopy	Anthony Walters	1:00 PM
TheraJect	1113885	Seajin	Oh	SBIR Phase I: Dissolvable Microneedle Study for Migraine Therapy	Gregory T. Baxter	1:15 PM
Torrey Hills Technologies, LLC	1112885	Lai	Qi	SBIR Phase I: Capture and Use of Coal Mine Ventilation Air Methane (VAM)	Anthony Walters	2:45 PM
Transmed Systems, Inc.	1113336	Jeremy	Miller	SBIR Phase I: Efficient Comparative Effective Research Tools In Real Time Environment	Juan E. Figueroa	2:45 PM
Trillium FiberFuels, Inc.	1112582	Stephen	Potochnik	SBIR Phase I: Xylose Isomerase from Marine Bacteria for Cellulosic Ethanol	Prakash Balan	2:15 PM
Triune Systems	1113400	Wayne	Chen	SBIR Phase I: Micro-Solar Powered Battery Charger Circuit	Muralidharan S. Nair	4:45 PM
Tymora Analytical Operations, LLC	1113085	Anton	Iliuk	SBIR Phase I: Development of Novel Dendrimer-based Technologies for Phosphorylation Analyses	Gregory T. Baxter	1:45 PM
United Science, LLC	1113251	Chunze	Lai	SBIR Phase I: In situ PFC Monitoring Sensors	Anthony Walters	3:45 PM
Variance Dynamical Corporation	1114110	Andreas	Tziolas	SBIR Phase I: Novel Method for Direct Frequency Component Decomposition: Electronic Neural Loops (ENLs)	Juan E. Figueroa	2:00 PM
VariWaves	1113508	John	Kountouriotis	SBIR Phase I: Electrically Reconfigurable Antennas for Wireless Local Area Networks	Muralidharan S. Nair	4:00 PM
Ward Process dba American Acoustical Products	1113541	Peter	Jackson	SBIR Phase I: Realizing Broadband Frequency Sound Absorption in Micro-Slit Panels	Ben Schrag	1:00 PM
Wasatch Photonics, Inc.	1112990	William	Brown	SBIR Phase I: High-speed Low-cost Spectral Domain Optical Coherence Tomography System for Intravascular Imaging Applications	Ruth M. Shuman	4:30 PM
XRSciences, LLC	1113913	Colin	Charette	SBIR Phase I: Laminography-based X-ray Security System for Aviation Security	Muralidharan S. Nair	1:45 PM
Xunlight 26 Solar, LLC	1113818	Alvin	Compaan	SBIR Phase I: Advanced Semitransparent CdTe PV	Grace Jinliu Wang	1:15 PM

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