

Minutes (Spring '17)

NATIONAL SCIENCE FOUNDATION

National Science Foundation, Arlington, VA

Engineering Directorate Division of Industrial Innovation and Partnerships

Report of the Advisory SubCommittee for Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

June 7-8, 2017

1.0 Introduction

The National Science Foundation (NSF) Advisory SubCommittee (AdCom) for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs met June 7-8, 2017, at the Phase II Grantees Conference in Atlanta, Georgia.

Advisory Committee members in attendance included:

William Lockwood-Benet

Susan Butts

Annette Finsterbusch

Arlene Garrison

Tom Knight (Chair)

Karen Kerr

Eugene Krentsel

Richard Paul

Susan Preston

Skip Rung

Ann Savoca

Karthik Ramani

Advisory Committee members absent:

David Spencer

NSF IIP representatives attending all or part of the meeting included:

Barry Johnson, Acting Assistant Director, IIP

Graciela Narcho, Acting Division Director, IIP

Ben Schrag, Senior Program Director, SBIR/STTR, IIP

Muralidharan Nair, SBIR/STTR Program Director, IIP

Henry Ahn, SBIR/STTR Program Director, IIP

Debasis Majumdar, SBIR/STTR Program Director, IIP

Jesus Soriano, SBIR/STTR Program Director, IIP

Rick Schwerdtfeger, SBIR/STTR Program Director, IIP

Anna Brady-Estevez, SBIR/STTR Program Director, IIP

Ruth Shuman, SBIR/STTR Program Director, IIP

Prakash Balan, IUCRC/PFI/GOALI Program Director, IIP

Kelly Monterroso, Communications Specialist, IIP

Eric Keys, AAAS Fellow, IIP

Miki Templeton, Program Analyst, IIP

Kevin Brogan, Program Analyst, IIP

Joseph Bonivel, AAAS Fellow

Joe Kliegman, AAAS Fellow

2.0 Agenda

Wednesday, June 7, 2017

12:00pm – 1:30 pm	Lunch with Phase II Grantees – all
1:30 pm – 1:45 pm	Welcome/Review Agenda/Confirm Approval of Minutes
1:45 pm – 2:30 pm	IIP Update – Gracie Narcho/Barry Johnson
2:30 pm – 3:15 pm	Phase II Grantee Conference Debrief – Entrepreneurial Education Discussion – report outs from those who attended
3:15 pm – 4:15 pm	NSF SBIR/STTR Assessment Update and Discussion – Ben Schrag
4:15 pm – 4:30 pm	Coffee Break (Location: A601)
4:30 pm – 5:30 pm	NSF SBIR/STTR Broadening Participation Update and Discussion – Jesus Soriano
5:30 pm – 6:30 pm	SBIR/STTR Subcommittee Structure and Plans – Barry Johnson
6:30 pm	Meeting Adjourns
7:30 pm	Dinner at 5 Seasons Westside, 1000 Marietta Street NW

Thursday, June 8, 2017

7:30 am – 8:30 am	Breakfast (Location: A601)
8:30 am – 8:45 am	Introduction and Overview of the Day – Tom Knight
8:45 am – 9:45 am	Communications Update and Discussion – Kelly Monterroso
9:45 am – 10:00 am	Coffee Break (Location: A601)
9:45 am – 11:15 am	SBIR/STTR Subcommittee Deliberations
11:15 am – 12:00 pm	SBIR/STTR Subcommittee Recommendations to the ENG AdCom
12:00 pm	Meeting Adjourns

3.0 Approval of Minutes from Last Meeting

The AdCom confirmed that the minutes from the prior meeting were approved via email prior to this meeting.

4.0 SBIR/STTR Subcommittee Recommendations

The underlined words below are our four Working Groups. Appendix 1 shows the members of each Working Group.

1. **Frequency and Location of Future AdCom meetings:** Because we are in a time of tight budgets, we understand the need to meet face-to-face once per year around Sept/Oct, with Working Group meetings in between via teleconference:
 - a. We volunteer for Working Group participation via teleconference between meetings
 - b. We also volunteer for a short teleconference for the full AdCom, where Working Groups could report out to Ad Com, without the need for preparation by the IIP Staff
 - c. Susan, our Liaison to the Engineering AdComm volunteers to talk with Eng

AdCom when needed, with support from Tom or others if needed.

- d. We also volunteer to attend future Grantees Conference if that would be helpful for IIP Staff

2. Assessment

- a. We see dramatic progress on assessment since our last meeting!
- b. The strategic framework is excellent, as well as the early graduate company data capture with CB Insights pilot.
- c. Ann Savoca has volunteered to join this working Group, given Assessment includes Broadening Participation
- d. See Appendix 2 for more detailed recommendations

3. Broadening Participation

- a. This is a key initiative! Go fast!
- b. Ann will work with Jesus to plan Working Group teleconferences. We are happy to meet quickly and frequently after this meeting.
- c. Continue to have this working group meet with Deal Flow
- d. See Appendix 3 for more detailed recommendations

4. Deal Flow

- a. Congratulations on >50% of Phase 1 proposals from new PIs!
- b. Put Salesforce in place as soon as possible.
- c. Continue to have this working group with Broadening Participation
- d. We continue to volunteer to be your Ambassadors. How can we get collateral to share?
- e. See Appendix 4 for more detailed recommendations

5. Entrepreneurial Education

- a. Congratulations on an outstanding Grantee Conference! Congrats Ruth! The feedback we heard from the Grantees Conference was very positive, especially from:
 - Grantees re assistance from PDs to grantees
 - Quality of workshops
 - Susan Preston's talk
- b. We will now start helping prepare training materials for Phase 0 Entrepreneurial Education, i.e., that educate first-time Phase 1 submitters on how to write a high-quality proposal.
 - Learn from iCorps nodes who received Phase 0 grants
 - Especially if no experience writing grants
- c. We will be planning how this Working Group can support our other Working Groups, especially Deal Flow and Broadening Participation
- d. See Appendix 5 for more detailed recommendations

5.0 Future Meeting Agenda

Our next meeting of the SBIR-STTR Advisory Subcommittee will be held November 28-29, 2017. We will provide an agenda well in advance of the meeting, as well as travel and other logistical information. We plan to start at 1pm on November 28th and conclude by 1pm on November 29th. We have reserved a meeting room (Room E2030) in the new NSF building in Alexandria.

We volunteer to meet as Working Groups between now and our next meeting. Just ask!

The AdCom appreciated how IIP shared the meeting agenda and the reading materials prior to this meeting.

AdCom's Proposed Agenda for the next meeting:

1. Update on IIP mission, vision, and strategic goals, including assessment metrics, as discussed in Appendix 1
2. Update on our Top Four Priorities/Working Groups
3. Discussions with Program Directors on topic(s) preselected to be of particular interest to the Program Directors.
4. Deliberations
5. Report Out

AdCom requests at least 75 minutes for our Deliberations, item #4, above.

Appendix 1: AdCom Working Groups, with Members and Key Contacts from IIP Staff

Working Group	Key Contact (from IIP Staff)	Chairperson (from AdCom)	Members (from AdCom)
Assessment	Barry Johnson	Robert “Skip” Rung	Susan Butts Dick Paul Susan Preston Karthik Ramani Ann Savoca David Spencer
Broadening Participation*	Gracie Narcho	Ann Savoca	Karen Kerr Tom Knight Arlene Garrison William Lockwood-Benet
Deal Flow*	Gracie Narcho	Annette Finsterbusch	Karen Kerr Eugene Krentsel Ann Savoca Susan Preston
Entrepreneurial Education	Barry Johnson	Susan Preston	Susan Butts William Lockwood-Benet Karthik Ramani Skip Rung

*Broadening Participation and Deal Flow have significant overlapping activities and will often meet together.

Appendix 2: Assessment Working Group - Detailed Commentary

The AdCom was very pleased to see ****complete**** fulfillment of the specific recommendation from the Fall 2016 meeting:

Leadership should articulate a **vision** with long-term **Big Hairy Audacious Goals (BHAG)** and a **get-started plan**; define **stakeholders** and define measures of success; select a few meaningful **metrics** for evaluation/assessment and **get started**, with **permanent staff**.

Under the **leadership** of Ben Schrag, Kelly Monterroso, Ben, Eric Keys and Joe Kliegman presented a **vision** consisting of a strategic framework for assessment that began with **stakeholder** (PDs, congress) interviews, continued with high-level stretch/aspirational **goals**, was fleshed out with specific **metrics** and data sources (some existing, some aspirational) and followed by **getting started** with significant preliminary data and analysis bearing on Broader Participation and longer term impact via companies that have graduated from the SBIR program since 2011. Two things in particular were highly informative: (1) Comparing earned PhD percentage share by underrepresented groups with their percentage share of proposals and awards, all by technical area (based on pairing/combining the PhD categories with SBIR funding areas/topics); and (2) Initial data and analysis of funding events and other developments for 2011 and 2012 (year of Phase I award) companies using CB Insights (a former NSF SBIR grantee with web-scraping technology for gleaning this information). There was a high success rate in finding/loading company data (based on grantee company URL) and numerous interesting findings, including the fact that there has been significant impact from Phase I grantees that did not progress to Phase II. Finally, IIP announced plans to fill a full-time **permanent** Science Analyst position dedicated to assessment.

The Assessment Working Group plans quasi-regular (perhaps quarterly) calls with Ben and assessment staff, beginning with one fairly soon to discuss AdCom responses to Ben's questions (slide 42 of assessment presentation) regarding goals or stakeholders that may be missing, and any additional resources or data that could be helpful. A preliminary topic, based on discussion among the larger AdCom group, will be metrics and analysis supporting and continuing to improve the all-important Program Director function.

Appendix 3: Broadening Participation Working Group - Detailed Commentary

Broadening Participation is a very important topic which has been a key initiative within IIP for many years.

Jesus Soriano assumed responsibility to lead the IIP Broadening Participation effort late last year. We were pleased to see the passion that Jesus has for this important initiative and the effort he has put into making a difference. However, given his heavy load as a full time Program Director, there is a concern about the amount of time he will have to drive this program to achieve the significant results that need to be made. Recognizing budgetary constraints we ask the IIP to consider other creative ways to provide Jesus with resources he will need to drive this program 'hard and fast'.

We thank Jesus for reminding us of the legal and regulatory framework that mandates an improvement in the participation of socially and economically disadvantaged small business concerns in the SBIR/STTR programs as well as participation in SBIR/STTR by small businesses that are 51% controlled by women.

Jesus shared his mission statement for Broadening Participation with us,

“Increase the diversity in the NSF SBIR/STTR program by fostering the **participation and competitiveness** of groups that are traditionally underrepresented or underserved in the STEM enterprise.”

and a key performance indicator:

number and quality of proposals submitted to NSF SBIR/STTR.

We recommend that the mission statement be broadened to reflect a goal to have more women and underrepresented minorities achieving business success through participation in the SBIR/STTR program. As such an additional key performance indicator should be established to gauge progress against this expanded mission. The working group is willing to help with this.

We were also very impressed with the 'Assessment' stakeholder analysis and recommend that a similar analysis be completed for 'Broadening Participation'.

Finally, we recommend that Jesus be the primary IIP contact for the ADCOM Broadening Participation working group and are excited about meeting with Jesus quickly and frequently after this meeting. Ann Savoca will work with Jesus to plan working group teleconferences. We recommend that the Deal Flow working group be included in these discussions.

Appendix 4: Deal Flow Working Group - Detailed Commentary

For the second, consecutive meeting, it is clear that the progress made on the communication strategy including the website rework is impressive. Congratulations to the team for hearing the importance, taking the suggestions and inputs, and driving solutions. As well, it is impressive that this work has incorporated the Best Known Methods from other agencies in order to expedite the timeline and conserve resources (Salesforce implementation). Finally, it is greatly appreciated that you are still engaging the AdCom as a whole and the specific subcommittees with respect to content and presentation.

Salesforce continues to be regarded as the backbone that will house the tribal knowledge for PDs and it is critical that implementation include integration with the website. Success for any CRM system also requires that Salesforce be used consistently and completely by all of the PDs after the rollout is complete. Open action items:

- Training PDs on using the system after rollout,
- Monitoring usage and continuous system improvement,
- Contact strategically aligned groups to dump their membership lists into the system to jumpstart the content compilation,

The new collateral and website presentation was also very impressive and clearly a great deal of work has been done to move this project forward. Great work. Open actions include:

- The number of first time applicants and the number of awards being made to these is impressive and should be clearly communicated on all of the outreach collateral as it will help to drive deal flow,
- Add Jesus Soriano to the meetings between Gracie, Kelly, Ann and Annette in order ensure that emphasis on Broadening Participation is addressed in the rework of collateral and website development,
- Make a decision about whether to go with PI photos and/or company logo for the site before it launches,
- Revisit and evaluate the idea to use a QR code that takes interested parties directly to the Biography page to see information on the site,
- Find opportunities to reduce the physical collateral and drive web traffic to reduce the risk of dated materials floating around.
- Consider using a focus group to evaluate the website before the launch,
- Ensure that the site is enabled for mobile users,
- Ensure that the video vignettes are embedded to support applicants through the application process,
- After launching the site, consider how you will encourage/ensure repeat visits to the site
 - Provide content from the Education presentations,
 - Include or spotlight thought leadership pieces to keep content current.

There is mutual agreement that AdCom members will provide their feedback on the website and collateral to Ann Savoca and Annette Finsterbusch by close of business on Thursday, June 15, 2017, after which the inputs will be shared with Gracie, Kelly, and Jesus by close of business on Friday, June 16, 2017. The AdCom will be provide a final review in advance of the launch with enough time to respond with feedback before the site goes live.

Appendix 5: Entrepreneurial Education Working Group - Detailed Commentary

Extraordinary program again this year. We received so many positive comments on the value of various sessions. Our congratulations and recognition of the substantial work in carrying-off a well run and content rich program. We see one of the fundamental roles of the educational working group to support other working groups. Therefore, we invite the working groups to reach out and request our support in the development of educational programs and projects. A couple of specific activities were identified: 1. We have been looking at how we can help new applicants understand the grant review process. The new website provides an excellent venue and framework to add a short vignette (2 to 3 minutes) which supplements the text to verbally explain (with images) the steps to possible grant issuance. To this end, we would be glad to coordinate on, and support development of, content for the website as relevant; 2. Through the last several years the AdCom has expressed a strong interest in acting as ambassadors for the program. Many of us speak at various conferences and other events and would like the ability to promote NSF SBIR/STTR. We ask for brief materials, ideally in slide deck form, we can use, accompanied by parameters for our discussions; 3. We would like to see more general educational materials added to the website that might be helpful to grantees on understanding business parameters and commercial growth. Perhaps one step would be to post materials from the Phase II Grantee Conference as permitted by the speakers; and 4. We would like to better understand how outreach will be accomplished at the Phase 0 to non-academic candidates - this ties into the Broadening Participation and Deal Flow Working Groups and illustrates the support role this working group can play.