

**NATIONAL SCIENCE FOUNDATION  
ARLINGTON, VA 22230**

**Engineering Directorate  
Division of Industrial Innovation and Partnerships**

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

22 October 2010

## 1.0 INTRODUCTION

The National Science Foundation (NSF) Advisory Committee (AdCom) for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs met October 21-22, 2010 at NSF.

Advisory Committee members in attendance included:

Patrick Brown  
Susan Butts  
Trish Costello  
Mark Clevey  
Arlene Garrison  
Albert Johnson  
Karen Kerr  
Tom Knight (Chairman)  
Angus Livingstone  
Karthik Ramani  
David B. Spencer  
John Tao  
E. Jennings Taylor  
Carol Wideman

Advisory Committee members absent:

Richard Paul

NSF representatives attending all or part of the meeting included:

Kesh Narayanan, Division Director, Industrial Innovation and Partnerships (IIP)  
Joseph Hennessey, Senior Advisor, IIP  
Cheryl Albus, SBIR/STTR Program Director, IIP  
Errol Arkilic, SBIR/STTR Program Director, IIP  
Greg Baxter, SBIR/STTR Program Director, IIP  
Murali Nair, SBIR/STTR Program Director, IIP  
Ben Schrag, SBIR/STTR Program Director, IIP  
Ruth Shuman, SBIR/STTR Program Director, IIP  
Tony Walters, SBIR/STTR Program Director, IIP  
Grace Wang, SBIR/STTR Program Director, IIP  
Amanda May, Program Support Manager, IIP  
George Vermont, SBIR/STTR Expert, IIP  
Tiffany Sargent, AAAS Fellow, IIP  
Malathi Srivatsan, AAAS Fellow, IIP

Other representatives attended all or part of the meeting included:

Winslow Sargeant, Chief Counsel for Advocacy, Small Business Administration

## 2.0 AGENDA

The agenda for the meeting is included below.

### Thursday, October 21, 2010

1:00 p.m.	Welcome & New Introductions	Tom Peterson Tom Knight Kesh Narayanan
1:30 p.m.	Discussion & Approval of May 2010 AdCom Meeting Minutes	Tom Knight
1:45 p.m.	IIP Strategy Overview	Kesh Narayanan
2:00 p.m.	Assessment & “DIMS” updates	Tiffany Sargent George Vermont
3:45 p.m.	Break	
4:00 p.m.	IIP Strategic Goals/Objectives Intro	Kesh Narayanan
4:15 p.m.	Goal: Assessment	Ben Schrag
4:30 p.m.	Goal: Innovation Leadership & Partnership	Ruth Shuman
4:45 p.m.	Goal: Globally Competitive Workforce	Grace Wang
5:00 p.m.	Chief Counsel for Advocacy, Small Business Administration	Winslow Sargeant
5:45 p.m.	Adjourn	
6:00 p.m.	Group Dinner	

### Friday, October 22, 2010

8:00 a.m.	Sign-In	
8:15 a.m.	Goal: Increased Commercialization	Murali Nair
8:30 a.m.	Goal: Operational Excellence	Amanda May
8:45 a.m.	IIP Response to COV Report	Kesh Narayanan & Tom Knight
9:45 a.m.	ADCOM Deliberations	
11:30 a.m.	AdCom Feedback to NSF AdCom Members	Tom Knight
12:00 p.m.	Adjourn	

### **3.0 COMMENTS and FEEDBACK**

The AdComm considered and provided feedback on the following discussion items from the meeting agenda.

#### Discussion and Approval of Minutes from Prior Meeting

After a brief discussion, the AdComm approved the minutes from the previous meeting held in May 2010.

#### Comments on Strengthening IIP Programs (I/UCRC Phase III, i6, Post-doc in SBIR, SBIR 2.0)

The AdComm members are impressed with how IIP as a division is strengthening IIP programs to achieve their vision and mission. Examples include:

- I/UCRC Phase III. The AdComm endorses IIP's plans to extend NSF support to 15 years and IIP's continued leveraging of industry and interagency funds to support this program.
- I6 Regional Innovation Challenge. The AdComm endorses IIP's leadership role and ability to leverage IIP's investment in this cross-agency collaboration.
- SBIR 2.0. AdComm supports IIP's collaboration with SBA and other SBIR agencies in the development of the Robotics Joint Solicitation, the broadening of Phase IIB, and the sharing of best practices. The AdComm encourages additional collaboration in these areas.
- Post-doc in SBIR. The AdComm endorses plans to utilize this program, particularly as a vehicle to broaden participation of underrepresented groups.
- Industry Inspired Fundamental Research (IFR). The AdComm supports IIP's collaboration with IRI and looks forward to the results and assessment of this pilot program.
- Translational Research in the Academic Community (TRAC). The AdComm supports IIP's pilot program in this area.

The AdComm encourages IIP to continue to innovate programs in this way, to continually assess their effectiveness, and to integrate pilot programs where appropriate into the overall IIP portfolio of programs.

#### Comments on New IIP Solicitations (AIR, revised PFI)

The AdComm members support IIP's creation of the following two solicitations:

- Accelerating Innovation Research (AIR). The AdComm supports IIP's plan in this area, both for the Technology Transfer Plan Competition, and Research Alliance Corporation.
- Partnership for Innovation (PFI). The AdComm supports IIP's plan to revise the PFI program to develop an Academic – Small Business Technology Platform.

### Assessment

The AdComm is impressed with IIP's continued progress on assessment, particularly the development and imminent "go live" of the Divisional Information Management System (DIMS), the assessment of characteristics shared by successful and unsuccessful SBIR grantees, and the efforts to gauge societal impacts.

The AdComm requests a demo of DIMS and its evolving capabilities at our next meeting.

The AdComm continues to volunteer to assist with these efforts. Members of the Subcommittee on Assessment include:

Karthik Ramani  
E. Jennings Taylor  
Al Johnson  
Tom Knight  
Dick Paul  
David Spencer

### Feedback on IIP Strategic Goals

The AdComm applauds the IIP leadership and staff on its on-going development of strategic goals to support its vision and mission, and the five goals presented:

- Assessment
- Innovation Leadership & Partnership
- Globally Competitive Workforce
- Increased Commercialization
- Operational Excellence

### Feedback on Comments from Small Business Administration

The AdComm appreciates the attendance and comments of Winslow Sargeant, Chief Counsel for Advocacy, Small Business Administration.

The AdComm notes Dr Sargeant's request for information in two areas:

1. Identifying factors contributing to the success of start-up companies
2. Identifying barriers to the successful creation and growth of start-up companies. Examples include patenting difficulties, or technology transfer issues from academia.

The AdComm notes IIP is developing an Assessment framework that can be used in both of these areas.

Therefore, the AdComm encourages IIP to explore mechanisms for utilizing its Assessment techniques to identify these success factors and barriers, and to use this analysis to inform Dr. Sargeant and (through the efforts of his office) policy makers.

### Feedback on Committee of Visitors Report

The AdComm supports the findings of the IIP COV and thanks the COV members for their contributions and recommendations.

### Outreach Activities to Broaden Participation

The AdComm applauds the IIP division's addition of Malathi Srivatsan, an AAAS Fellow focused on broadening participation, and looks forward to progress in this area.

The AdComm requests that at our next meeting Malathi present:

- trend data showing the percentage of underrepresented groups (including women) in Phase 1 proposals and awards over the last several years
- plans for increasing these trends.

We continue to volunteer as needed to support these activities and will continue our Subcommittee on Outreach Activities to Broaden Participation. The Subcommittee includes:

Patrick Brown  
Karen Kerr  
Tom Knight  
Carol Wideman (Chair)

### Other Feedback and Recommendations

The AdComm commends IIP on recruiting and retaining top talent.

## **FUTURE MEETING**

The next AdComm meeting will occur in Baltimore at the grantees conference starting Thursday, May 12, 2011 at 8AM and ending Friday, May 13, at noon.

Proposed Agenda:

- Outreach Activities to Broaden Participation. Please present recent trends and future plans as described above.
- Update on IIP Five Year Plan and its Five Goals:
  - o Assessment. Please present a demo of DIMS as described above.
  - o Innovation Leadership & Partnership
  - o Globally Competitive Workforce
  - o Increased Commercialization
  - o Operational Excellence
- Deliberations and Report Out