

# SBIR/STTR & The Role of State Programs



The National Academies  
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Sujai Shivakumar, PhD.  
Board on Science, Technology, and Economic Policy  
The National Academies

# Welcome to the National Academies

- President Lincoln signed a congressional charter forming the National Academy of Sciences in 1863.
- We provide expert advice on some of the most pressing challenges facing the nation and the world.
- Our work helps shape sound policies, inform public opinion, and advance the pursuit of science, engineering, and medicine.

# The Academies' Board on Science, Technology, and Economic Policy

- For over 25 years, STEP studies have identified ways to:
  - Accelerate innovation,
  - Advance U.S. competitiveness through better policy,
  - Improve our understanding of the nation's economic performance, and
  - Learn from other nations' policies and practices.

# STEP Work on Innovation Policy

- Patents in the Knowledge Based Economy
  - Chaired by Richard Levin, Yale University & Mark Myers, University of Pennsylvania
- Best Practice in Public-Private Partnerships: Guidance on What Works
  - Chaired by Gordon Moore, Chairman Emeritus, Intel
- Innovation in Global Industries
  - Chaired by David Morgenthaller, Morgenthaller Ventures
- Rising to the Challenge: U.S. Innovation Policies for the Global Economy
  - Chaired by Ambassador Alan Wm. Wolff, McKenna Long & Aldridge, Former Deputy USTR

# STEP Studies of State and Regional Innovation in the U.S.

- 2013 Report on Best Practice in State and Regional Innovation Initiatives
  - Highlights new state and regional initiatives to strengthen existing industries and develop new technology focus areas.
  - Identifies best practices with regard to goals, structures, instruments, modes of operation
  - Calls for effective public-private partnerships, committed leadership, & substantial and sustained funding.

# New Review of the Utah Innovation Economy

To review the concept and operation of the  
Utah Science Technology and Research  
Initiative and its potential economic  
impact on the state of Utah.

# STEP's Review of Global Manufacturing Programs

- 2013 STEP Report assessed MEP and reviewed leading national programs to support Applied Research and Manufacturing
  - Germany's Fraunhofer Institutes
  - Canada's Industrial Research Assistance Program
  - Taiwan's Industrial Technology Research Institute
  - Britain's Catapult Initiative
  - France's Carnot Institutes
- Discussed current U.S. needs and initiatives in light of the global focus on advanced manufacturing.

# New Report this Fall on Programs to Support Flexible Electronics

- **Global Review:** Reviews the goals, concept, structure, operation, funding levels, and evaluation of foreign programs similar to major U.S. programs.
- **U.S. Initiatives:** Describes current federal, state and private research and commercialization initiatives in the U.S.
- **Research Consortia:** Examines the role of research consortia around the world to advance flexible electronics technologies.
- **Recommendations:** What appropriate steps are needed for the U.S. to develop the industry in the U.S.?



# New STEP Study on Middle Skills

The Supply Chain for Middle-Skill Jobs: Education,  
Training, and Certification Pathways

Examine programs to prepare Americans for  
technically oriented, skilled positions in the workforce

# STEP to Host the Rollout of the Advanced Manufacturing Partnership 2.0 Report

October 27, 2014

At the National Academy of Sciences

# STEP's Assessment of Innovation Programs

The Small Business Innovation Research  
Program—now in Round 2  
New Review of ARPA-E

# New: Assessment of ARPA-E

Review and evaluate the progress  
that ARPA-E has made toward  
funding revolutionary advances in  
energy technology.

# Round 1: Study of SBIR

Reaffirmed the program's concept  
Assessed the effectiveness of agency SBIR  
programs at DoD, DoE, NIH, NASA., NSF  
Study had a major impact on the 2011  
Reauthorization of SBIR/STTR

# Round 2 of the SBIR Study

- Follow-up NRC surveys, case studies, program data, and interviews to capture changes in program perceptions, practices, and outcomes
- Reports on SBIR and STTR programs at DoD, NSF, NASA, NIH and DoE
- Focus on operational improvements

## Key Issues: Round 2 of the SBIR Study

- Exploring strategies to encourage participation by minorities and women led firms in SBIR. (February 2013)
- University-industry partnering and synergies with the SBIR/STTR programs. (February 2014)
- **Today's Conference:**
  - Release of the Committee's report on the DoD SBIR Program
  - Examine the role of complementary state and federal programs.

## SBIR/STTR & the Role of State Programs

- How are some state programs leveraging the federal SBIR/STTR for economic development?
- What is the impact on SBIR/STTR?
- What are current outreach efforts to the states?
- We look forward to your active participation.



It is now my pleasure to introduce the  
Chair of this study:

**The Hon. Jacques Gansler**

Roger C. Lipitz Chair in Public Policy and Private Enterprise  
Director, Center for Public Policy and Private Enterprise  
University of Maryland

Former Under Secretary for Defense for  
Acquisition, Technology and Logistics

# Thank You



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