

# Early-stage Capital in the United States:

## Moving Research Across the Valley of Death and the Role of SBIR



The National Academies  
Washington DC  
April 16, 2010

Charles W. Wessner, Ph.D.  
The National Academies

# Welcome to the National Academies



- **National Academy of Sciences**
  - Chartered by Congress in 1863
  - A self-perpetuating Honorary Society
- **National Research Council (1916)**
  - The Operating Arm of the National Academies
- **National Academy of Engineering (1964)**
- **Institute of Medicine (1970)**

# Board on Science, Technology, and Economic Policy (STEP)

- The mandate of the STEP Board is to:
  - Integrate understanding of scientific, technological, and economic elements
  - Formulate national policies affecting the economic well-being of the United States.
- STEP studies identify means of:
  - Accelerating innovation
  - Advancing competitiveness and
  - Improving our understanding of the nation's economic performance and of other nations' policies and practices

# **Paul Joskow is the new Chair of the National Academies STEP Board**

- President of the Alfred P. Sloan Foundation
- James Killian Professor of Economics, MIT
- Past STEP Chairs include Lawrence Summers and Dale Jorgenson

# STEP's Work Addresses the Challenge of the Global Innovation Imperative

- Best Practice in Public-Private Partnerships: Guidance on What Works
  - Chaired by Gordon Moore, Chairman Emeritus, Intel
- Innovation in Global Industries
  - Chaired by David Morgenthaler, Morgenthaler Ventures
- Patents in the Knowledge Based Economy
  - Chaired by Richard Levin, Yale University & Mark Myers, University of Pennsylvania

# STEP's Current Innovation Work

- Comparative National Innovation Policies: Best Practice for the 21st Century
  - Chaired by Ambassador Alan Wm. Wolff, Dewey & LeBoeuf, Former Deputy USTR
- Best Practices in State and Regional Programs
  - Chaired by Mary Good, University of Arkansas, Former Under Secretary for Technology at the Department of Commerce
- Crossing the Valley of Death: An Assessment of the SBIR Program
  - Chaired by Jacques Gansler, University of Maryland, and Former Under Secretary for Technology and Acquisition at the Department of Defense



# The Global Innovation Imperative

- Key Points

- **Innovation** is Key to Growing and Maintaining a Country's Competitive Position in the Global Economy and to address Global Challenges
- **Collaboration** among Small and Large Businesses, Universities, and Research Institutes is Essential for Innovation
- **Proven Innovation Programs** are needed to support collaboration and accelerate innovation

# Addressing the Innovation Imperative

The Obama Administration Recognizes  
the Importance of Innovation as a  
Source of Jobs and Growth

# Pledge to Raise R&D and Create new Incentives for Innovation

- “We will devote more than **3 percent** of our GDP to research and development.”
  - The U.S. joins the quest for the Lisbon Target
- “We will not just meet, but we will exceed the level achieved at the height of the space race, through policies that
  - invest in basic and applied research,
  - create new incentives for private innovation,
  - promote breakthroughs in energy and medicine, and
  - improve education in math and science.”

**Address to the National Academy of Sciences, April 27, 2009**

# Mechanisms to Bridge the Valley of Death are Also Important

SBIR is a key tool to help small innovative firms bring new products to market

Other Tools May be Needed

# Today's Conference Launches the next Phase of the SBIR Assessment

- This second phase will:
  - Build on the knowledge gained in the first phase of the assessment
  - Provide a valuable second view of the SBIR program's evolution and impact
  - Analyze research topics relevant to the SBIR program's operation and evaluation efforts that emerged in the course of the first phase
  - Addresses agency requests for additional analysis of topics related to the SBIR program

# Today's Symposium will...

- Describe the Early Stage Finance Challenge and the Valley of Death
- Highlight the role of federal innovation programs
  - How do SBIR and the Technology Innovation Program help small innovative firms cross the Valley of Death
- Examine some leading technology-based development programs underway at the state level
- Explore early stage finance challenges faced by women and minorities

# We Look Forward to a Lively and Constructive Discussion

- We thank our distinguished speakers, moderators, and participants for their willingness to join us today
- We thank the participating agencies that have made this meeting possible
- We thank the National Economic Council for their interest and support
- We also welcome your participation in this meeting.
  - Your interventions can be a valuable contribution to national policy

It is now my pleasure to introduce 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