

**NATIONAL SCIENCE BOARD WORKSHOP**

**Committee on Strategy and Budget  
Task Force on Cost Sharing**

**Roundtable Discussion on Cost Sharing 2**

*Voluntary Cost Sharing: Specification, Tracking, and Role in the NSF Decision Process*

**National Science Foundation  
4201 Wilson Boulevard  
Room 1235  
Arlington, Virginia  
July 9, 2008**

**AGENDA**

- 8:00 a.m.     **Welcoming Remarks**
- Dr. Kelvin Droegemeier\*, Member, National Science Board, and Chair, Task Force on Cost Sharing
- 8:05 a.m.     **Motivation, Purpose and Goals**
- Dr. Droegemeier\*
- 8:15 a.m.     **Process and Logistics for Board Workshops**
- Dr. Craig Robinson, Acting Executive Officer, National Science Board
- 8:20 a.m.     **Introduction of Participants**
- 8:30 a.m.     **Remarks: Brief History of NSF Cost Sharing Policy, Overview of Challenges, and February 2008 Report to Congress**
- Speaker: Dr. Droegemeier\*
- 9:00 a.m.     **Discussion Session 1: Voluntary Cost Sharing and NSF Program Goals**
- Mandatory cost sharing plays a relatively well-understood role and is subject to straightforward implementation strategies in the Federal grant funding process. Mandatory cost sharing refers to those resources required from grantee institutions by particular Federal agencies, usually with different requirements for different programs and solicitations. The fundamental role of voluntary cost sharing is less clear in the Federal grant funding process, although the resources and impacts associated with such sharing clearly are significant. Voluntary cost sharing describes resources made available to a given project solely at the discretion of the grantee institution performing*

\* Task Force Member

*the research; these resources can be committed (pledged formally in the proposal and made a binding condition of the award) or uncommitted (not formally pledged in the proposal and approved budget, but subsequently made available to the project). Voluntary cost sharing is not regulated by NSF policy, but contributions offered in an NSF proposal during the NSF decision process are considered binding and auditable contributions upon award of the grant.*

1. What role does voluntary cost sharing play in establishing the structure, goals, and budgets of NSF programs and solicitations?
2. What role does voluntary cost sharing play in actually achieving the goals of particular NSF programs and the grants they fund?
3. How would the quality and quantity of research funded by NSF be impacted if voluntary cost sharing were restricted or eliminated?

Discussion Moderators: Dr. Mark Abbott\*, Ms. Lynn Preston

10:00 a.m. **Break**

10:15 a.m. **Discussion Session 2: Voluntary Cost Sharing and Institutional Competitiveness in NSF Grant Funding**

*The Board's 2004 policy that eliminated program-specific mandatory cost sharing for all NSF programs was motivated in part by concerns that the difficulty for some institutions to provide cost sharing inhibited or eliminated their ability to compete for NSF funding. The 2004 policy effectively eliminated ability to provide cost sharing as a factor in institutional competitiveness in NSF funding opportunities. Voluntary cost sharing is not regulated by NSF policy and remains a factor that may impact relative institutional competitiveness in all NSF funding opportunities. Relative ability to provide voluntary cost sharing may give advantage to certain types of institutions. On the other hand, ability to provide voluntary cost sharing may assist institutions in building research capacity, infrastructure, and program sustainability.*

1. To what extent is voluntary cost sharing necessary for a proposal or institution to be competitive in NSF funding opportunities?
2. To what extent does the type or nature of an institution impact its ability to provide voluntary cost sharing?
3. In what ways could voluntary cost sharing be used to stimulate participation and enhance competitiveness in NSF funding opportunities without providing an unfair advantage to any particular type of institution?

Discussion Moderators: Dr. Jon Strauss\*, Dr. Eva Pell

11:15 a.m. **Discussion Session 3: Voluntary Cost Sharing in NSF Merit Review Process**

*Voluntary cost sharing is not regulated by NSF policy, and NSF has no formal method during the merit review process by which to account for or evaluate voluntary cost sharing. General NSF practice is for program officers to not consider any offers of voluntary cost sharing during the merit review process. However, institutional resources offered in a proposal as voluntary cost sharing may be apparent to reviewers during the merit review process. Such offers may be articulated formally in the proposal narrative, in letters of support, or in the budget (e.g., faculty claiming zero salary for time*

\* Task Force Member

*contributed to the project). Resources provided as voluntary cost sharing may bear on the principal investigator (PI) or institution's ability to complete the work described in a proposal.*

### **NSF Perspective Target Questions**

1. How is voluntary cost sharing currently handled in the NSF merit review process?
2. What are the positive and negative implications of formally considering voluntary cost sharing in the NSF merit review process?
3. What are possible means by which voluntary cost sharing could be formally and objectively considered as part of the NSF merit review process?

### **Institutional Perspective Target Questions**

1. What institutional practices are followed for including voluntary cost sharing on proposals submitted to NSF? To what extent do principal investigators and sponsored programs officials coordinate to ensure that voluntary cost sharing commitments are communicated effectively to both NSF and their institution?
2. How should principal investigators express voluntary cost sharing in their proposals? What are effective internal institutional processes that would ensure the fulfillment of voluntary cost sharing commitments?
3. What institutional perceptions exist regarding the importance and evaluation of voluntary cost sharing in the NSF merit review process?
4. What are possible means by which voluntary cost sharing could be formally and objectively considered as part of the NSF merit review process?

### **Synthesis Questions**

1. Philosophically, to what extent should voluntary cost sharing formally enter the NSF merit review process?
2. Mechanistically, what are possible means by which voluntary cost sharing could be formally and objectively considered as part of the NSF merit review process? Should all voluntary cost sharing be "committed"?

Discussion Moderators: Dr. Droegemeier\*, Dr. Thomas Taylor\*

12:15 p.m. **Lunch (Room 1235, provided for Roundtable 2 and Roundtable 3 participants)**

### **Presentations: State-Level Perspectives on Cost Sharing**

- Dr. Thomas Armstrong, University Liaison and Nanotechnology Program Manager, Technology Investment Office, Department of Community and Economic Development, State of Pennsylvania
- Dr. Paul Hill, Vice Chancellor, Division of Science and Research, West Virginia Higher Education Policy Commission

1:30 p.m. **Break**

\* Task Force Member

2:00 p.m.

#### **Discussion Session 4: Types, Sources, and Timing of Voluntary Cost Sharing**

*Currently, institutions applying for NSF grants may commit voluntary cost sharing resources in any form allowable under OMB Circular A-110 (2 CFR § 215.23). All cost sharing resources can be contributed toward any category of project cost and must be allowable (according to Federal cost principles in Circulars A-21 and A-110 [2 CFR § 215]), allocable (with direct benefit to the award), necessary (needed to carry out the objectives of the award), reasonable (what a prudent business person would pay), and contributed toward costs incurred during the award period. For some NSF programs, certain types of cost sharing resources may be more appropriate (e.g. cash industry membership fees in the I/UCRC program). Some institutions may be more able to contribute resources in certain forms. Certain types of resources may bear differently on the ability to achieve the goals of NSF programs and particular grants funded by the programs.*

1. What are the relative merits of cash and in-kind cost-shared resources? What types of resources should institutions be permitted to bring to NSF projects? What types of resources should not be allowed?
2. What is the relative value of cash and in-kind cost sharing to NSF? To different types of institutions?
3. Would certain types of institutions be unfairly impacted if cost sharing were restricted to cash only?

Discussion Moderators: Dr. Droegemeier\*, Ms. Jean Feldman, Mr. Charles Zeigler

3:00 p.m.

#### **Discussion Session 5: Tracking and Reporting Cost-Shared Resources**

*The Board's 2004 policy that eliminated program-specific cost sharing for all NSF programs was motivated in part by concerns about the difficulties of documentation and satisfaction of cost sharing obligations and the burden on grantee institutions of tracking and reporting cost-shared resources. Federal agencies and grantee institutions are required to maintain auditable records for direct research costs and mandatory cost sharing. Voluntary cost sharing resources offered in an NSF proposal during the NSF decision process are also considered binding and auditable contributions upon award of the grant.*

1. What are the nature and magnitude of challenges, both for NSF and grantee institutions, in tracking and reporting both mandatory and voluntary cost sharing? How do the challenges differ for cash and in-kind cost sharing?
2. What are the impacts of time and effort reporting and agency funding regulations (e.g. restrictions on payment of summer salary) on tracking and reporting both mandatory and voluntary cost sharing?
3. What are possible ways to mitigate the challenges of tracking and reporting cost sharing?
4. What consequences should institutions be subject to when they fail to fulfill cost sharing obligations?

Discussion Moderators: Dr. Camilla Benbow\*, Dr. Susan Sedwick

4:00 p.m.

#### **Break**

\* Task Force Member

4:15 p.m.      **Plenary Discussion**

Discussion Moderator: Dr. Droegemeier\*

5:00 p.m.      **Summary and Next Steps**

5:15 p.m.      **Adjourn**

5:30 p.m.      **Reception (Room 390, for Roundtable 2 and Roundtable 3 participants)**

# **NATIONAL SCIENCE BOARD WORKSHOP**

## **Committee on Strategy and Budget Task Force on Cost Sharing**

### **Roundtable Discussion on Cost Sharing 2**

#### ***Voluntary Cost Sharing: Specification, Tracking, and Role in the NSF Decision Process***

**National Science Foundation  
4201 Wilson Boulevard  
Room 1235  
Arlington, Virginia  
July 9, 2008**

### **LIST OF CONFIRMED PARTICIPANTS**

#### **National Science Board Members**

|                                                    |                                                                                                                                                                                                                   |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dr. Steven C. Beering, Chairman                    | President Emeritus, Purdue University, West Lafayette                                                                                                                                                             |
| Dr. Mark R. Abbott*                                | Dean and Professor, College of Oceanic and Atmospheric Sciences, Oregon State University                                                                                                                          |
| Dr. Dan E. Arvizu                                  | Director and Chief Executive, National Renewable Energy Laboratory                                                                                                                                                |
| Dr. Camilla P. Benbow*                             | Patricia and Rodes Hart Dean of Education and Human Development, Peabody College, Vanderbilt University                                                                                                           |
| Dr. Kelvin K. Droegemeier,<br>Task Force Chairman* | Associate Vice President for Research, Regents' Professor of Meteorology and Weathernews Chair, University of Oklahoma, Norman                                                                                    |
| Dr. José-Marie Griffiths                           | Dean, School of Information and Library Science, University of North Carolina, Chapel Hill                                                                                                                        |
| Dr. Douglas Randall§                               | Professor and Thomas Jefferson Fellow and Director, Interdisciplinary Plant Group, University of Missouri-Columbia                                                                                                |
| Dr. Jon C. Strauss*                                | President Emeritus, Harvey Mudd College                                                                                                                                                                           |
| Dr. Thomas N. Taylor*                              | Roy A. Roberts Distinguished Professor, Department of Ecology and Evolutionary Biology, Curator of Paleobotany in the Natural History Museum and Biodiversity Research Center, The University of Kansas, Lawrence |

Dr. Arden L. Bement, Jr., *ex officio*      Director, National Science Foundation  
Dr. Craig R. Robinson      Acting Executive Officer, National Science Board

*\* Task Force Member, § Board Consultant, as of 5/11/08*

## **Participants**

Dr. Thomas Armstrong      University Liaison and Nanotechnology Program Manager,  
Technology Investment Office, Department of Community and  
Economic Development, State of Pennsylvania

Dr. Robert Berdahl      President, Association of American Universities

Dr. Claude Canizares      Vice President for Research & Associate Provost, Massachusetts  
Institute of Technology

Dr. Donna Dean      Senior Science Advisor, Washington Office, Association of  
Independent Research Institutes

Dr. Marc Donohue      Professor, Chemical and Biomolecular Engineering, and Vice  
Dean for Research, Whiting School of Engineering, Johns  
Hopkins University

Ms. Jean Feldman      Head, Policy Office, Division of Institution & Award Support,  
Office of Budget, Finance, and Award Management, National  
Science Foundation

Mr. Howard Gobstein      Vice President, Research and Science Policy, National  
Association of State Universities and Land-Grant Colleges

Dr. Paul Hill      Vice Chancellor, Division of Science and Research, West  
Virginia Higher Education Policy Commission

Ms. Cindy Hope      Director of the Office for Sponsored Programs, University of  
Alabama

Dr. Anthony (Eamonn) Kelly      Professor, College of Education and Human Development,  
George Mason University

Dr. Eva Pell      Senior Vice President for Research and Dean of the Graduate  
School, Pennsylvania State University

Ms. Lynn Preston      Deputy Director, Division of Engineering Education & Centers,  
Directorate for Engineering, National Science Foundation

Ms. Marguerite Pridgen      Senior Policy Analyst, Office of Management and Budget

Dr. Susan Wyatt Sedwick

Associate Vice President for Research and Director, Office of Sponsored Projects, The University of Texas at Austin, and Member, Board of Directors, National Council of University Research Administrators

Dr. Mary Ellen Sheridan

Associate Vice President for Research (retired), University of Chicago, and Member, Advisory Committee for Business & Operations, National Science Foundation

Mr. Charles Zeigler

Special Assistant, Division of Institution & Award Support, Office of Budget, Finance, and Award Management, National Science Foundation