NATIONAL SCIENCE BOARD WORKSHOP

Committee on Strategy and Budget Task Force on Cost Sharing

Roundtable Discussion on Cost Sharing 3

Implications of Mandatory and Voluntary Cost Sharing for Broadening Participation in Science and Engineering Research and Education

National Science Foundation 4201 Wilson Boulevard Room 1235 Arlington, Virginia July 10, 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 and Specific Challenges in Broadening Participation	
	Speaker: Dr. Droegemeier*	
9:00 a.m.	Discussion Session 1: Mandatory Cost Sharing and Institutional Competitiveness in NSF Grant Funding	
	In October 2004, the Board approved a revision to NSF cost sharing policy that eliminated NSF program-specific mandatory cost sharing requirements. The Board's policy was motivated in part by concerns that the inability of 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 an **eligibility** factor in institutional competitiveness in these NSF funding opportunities.

- 1. How have previous mandatory cost sharing requirements impacted the participation of smaller and traditionally underrepresented institutions in NSF funding opportunities?
- 2. Has the ability of smaller and traditionally underrepresented institutions to participate competitively in NSF funding opportunities changed since the 2004 cost sharing policy was implemented? If so, in what ways?

Discussion Moderators: Dr. Richard Thompson*, Dr. Jerry Odom

10:00 a.m. Break

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

Concerns raised about the relative competitiveness of different types of institutions in NSF funding opportunities in terms of offering voluntary cost sharing remain unresolved. 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 contributed to the project).

- 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. Droegemeier*, Dr. Orlando Taylor

11:15 a.m. Discussion Session 3: Cost Sharing and Institutional Strategic Investment

Cost sharing has been rationalized by the idea that it brings additional financial resources to the research enterprise; serves as a means for leveraging institutional and state and local government support; provides incentives for strategic planning and buy-in by grantee institutions; promotes sustainability for large, multi-year activities initiated with Federal funding; and provides a means for creating meaningful partnerships with industry. Cost sharing has been required in certain NSF programs that achieve such objectives as developing research infrastructure that can be used beyond the scope or life of the specific NSF award, or generating revenue for the grantee institution. An institution's decision to participate had to be made in the context of long-term strategic priorities, institutional goals, and a desire to achieve sustainability beyond NSF funding.

1. How does cost sharing, both mandatory and voluntary, impact institutional strategic planning?

- 2. To what extent can cost sharing requirements be used as a means of assisting smaller and traditionally underrepresented institutions in becoming and remaining competitive for external research funding?
- 3. Does cost sharing promote institutional sustainability of NSF-funded programs once NSF funding ends? Does it promote the involvement of industry in ways that otherwise would not be possible or likely?

Discussion Moderators: Dr. Thomas Taylor*, Ms. Cindy Hope

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

Presentation: Cost Sharing as a Tool for Stimulating Participation and Competitiveness in NSF Grant Funding

Dr. Shirley Malcom, Head, Directorate for Education and Human Resources, American Association for the Advancement of Science

1:30 p.m. Discussion Session 4: Options for Ensuring Institutional Equity in NSF Grant Funding

No NSF program solicitation issued since the Board's 2004 cost sharing policy revision was implemented has required mandatory cost sharing (except the FY 2008 solicitation for the Major Research Instrumentation [MRI] program, for which mandatory cost sharing was specifically reinstated by the America COMPETES Act). In FY 2009, NSF will reinstate mandatory cost sharing for the EPSCoR, ERC, and I/CRC programs, as recommended in the Board's February 2008 report to Congress on NSF cost sharing policies. Mandatory cost sharing in such programs and voluntary cost sharing in all NSF programs remain factors that may impact relative institutional competitiveness and equity in all NSF funding opportunities.

- 1. What policies might be enacted by NSF to ensure institutional equity in NSF funding opportunities that require mandatory cost sharing?
- 2. What policies might be enacted by NSF to ensure institutional equity in **all** NSF funding opportunities?
- 3. What policies might institutions employ to more effectively meet both mandatory and voluntary cost sharing needs?

Discussion Moderators: Dr. Daniel Hastings*, Dr. Wesley Harris

- 2:30 p.m. Break
- 2:45 p.m. Plenary Session for Roundtable 3

Discussion Moderators: Dr. Droegemeier* & Dr. Jon Strauss*

3:45 p.m. Combined Plenary Session for Roundtables 2 and 3

Discussion Moderator: Dr. Droegemeier*

- 4:45 p.m. Summary and Next Steps
- 5:00 p.m. Adjourn
- * Task Force Member

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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. Camilla P. Benbow*	Patricia and Rodes Hart Dean of Education and Human Development, Peabody College, Vanderbilt University
Dr. Kelvin K. Droegemeier, 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. Daniel Hastings*§	Dean for Undergraduate Education and Professor, Aeronautics & Astronautics and Engineering Systems, Massachusetts Institute of Technology
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. Richard F. Thompson* Dr. Arden L. Bement, Jr., <i>ex officio</i>	Keck Professor of Psychology and Biological Sciences, University of Southern California 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

Ms. Carrie Billy	Deputy Director, American Indian Higher Education Consortium
Mr. Ronald Blakely	Deputy Director, White House Initiative on HBCUs
Ms. Elaine Craft	Director, South Carolina Advanced Technological Education Center of Excellence; President/CEO, SCATE Inc., Florence- Darlington Technical College; and Member, Advisory Committee for Business & Operations, National Science Foundation
Dr. Janice Cuny	CISE Program Director, Broadening Participation in Computing, National Science Foundation
Mr. William Rafael Gil	Executive Director, National Internship Program, Hispanic Association of Colleges & Universities
Dr. Wesley Harris	Chair, Committee on Equal Opportunities in Science and Engineering, National Science Foundation, and Associate Provost, Massachusetts Institute of Technology
Dr. Beverly Karplus Hartline	Member, Committee on Equal Opportunities in Science and Engineering, National Science Foundation, and Dean of Mathematics, Natural Sciences, and Technology, Delaware State University
Ms. Cindy Hope	Director for Research Administration, University of Alabama
Dr. Shaik Jeelani	Director, Center for Advanced Materials and Vice President, Research and Sponsored Programs, Tuskegee University
Dr. Shirley Malcom	Head, Directorate for Education and Human Resources Programs, American Association for the Advancement of Science
Dr. Jerry Odom	Executive Director, University of South Carolina Foundations, University of South Carolina

Dr. Yuri Rojas	Director, Research and Development Center, University of Puerto Rico at Mayaguez
Dr. Orlando Taylor	Vice Provost for Research, Dean of the Graduate School, Howard University
Ms. Cindy White	Director, Office of Research, Belmont University