

American Mathematical Society
Committee on Science Policy Meeting
April 17-18, 2007
Washington, DC

Summary Report

The 2007 Committee on Science Policy (CSP) meeting included a Hill Day of meetings between meeting participants and Members of Congress and/or their staffs. These Hill meetings were for advocating for increased funding in the FY2008 federal budget for the National Science Foundation and the Office of Science at the U.S. Dept. of Energy. The CSP meeting included information sessions on the federal budget request for FY2008, an orientation session on how to conduct meetings with congressional offices, and a discussion of the message delivered during meetings. On Wednesday morning, participants met over breakfast with newly elected Congressman, Jerry McNerney (CA-11). McNerney is a PhD mathematician.

Highlights from presentations:

Peter March, Director, Division of Mathematical Sciences
National Science Foundation

Peter March gave an overview of the NSF Division of Mathematical Sciences (DMS) and discussed the division's support of core disciplines, collaborative and interdisciplinary activities, workforce programs, research infrastructure and other foundation-wide initiatives. March also discussed DMS budget trends, award sizes, and funding rates. He talked about how the division fits into the broader context of NSF investment priorities and articulated DMS investment priorities. He concluded his presentation by discussing a new NSF initiative related to the American Competitiveness Initiative: Cyber-enabled Discovery and Innovation (CDI). CDI is set to be funded NSF-wide at \$52 million in the FY2008 budget. DMS will receive \$5.2 million of this amount.

James Turner, Chief Counsel
House Committee on Science & Technology

Jim Turner briefly discussed the federal budget appropriations process. He also talked about what participants could expect from their meetings on Capitol Hill, including such things as the age of Congressional staff and their educational backgrounds. He pointed out that there are few Members of Congress or staff with science backgrounds and, therefore, it was important to provide anecdotal evidence of how research funding furthers innovation. Turner encouraged all participants to let this experience be a stepping stone to building an ongoing relationship with their Members of Congress.

Kei Koizumi
Director, R&D Budget and Policy Program
American Association for the Advancement of Science

Kei Koizumi began his presentation on the FY2008 federal budget request by outlining the composition of the budget and looking at trends in discretionary spending over the past 30+ years. He pointed out that because of a record federal budget deficit, the President's plan is to balance the budget by 2012, primarily by cutting discretionary spending.

The overall FY2008 budget proposes large increases for defense and homeland security, and flat or declining funding for the rest of the federal research and development portfolio. A look at the federal investment in mathematics research specifically shows that, despite cuts to overall science and technology, mathematics investments appear to increase at DARPA in the U.S. Dept of Defense. The DMS at the

National Science Foundation would increase 8.6% as part of the ACI. The Advanced Scientific Computing Research program in the Office of Science at the U.S. Dept of Energy will increase by over 20 percent as part of the ACI. Investments in the mathematical sciences could also increase in NIGMS and NIBIB of the National Institutes of Health.

***James Glimm, AMS President
Stony Brook University***

Jim Glimm discussed the Mathematics of Information Driven Science, an area with the potential to become a major branch of science in the 21st century. He discussed the characteristics of deductive and inductive based science and explained how the two are often intertwined. He also described their differences.

Glimm shared with attendees an outline for a special session at the Joint Mathematics Meetings in 2008 that proposes to bring together groups of scientists and mathematicians to discuss the new generation of mathematical challenges arising from massive structures and data sets. The session will include both practitioners and mathematicians who will discuss the need for new mathematical tools and models.

***Sam Rankin
AMS Associate Executive Director***

Sam Rankin began his presentation by discussing the message that attendees will convey in their meetings with Congressional offices. He detailed a one-page handout that discusses the necessity of investing in mathematics in order to ensure continued U.S. competitiveness in the global economy. This handout also specifies what participants will be asking their Members of Congress to do: 1) support an FY2008 budget of at least \$6.43 billion for the National Science Foundation and a Division of Mathematical Sciences budget of at least \$223.47 million; and 2) support an FY2008 budget of \$4.4 billion for the Office of Science at the U.S. Dept of Energy and at least \$340.2 million for the Mathematical, Information, and Computational Sciences Program.

Rankin also provided some meeting guidelines to attendees. He discussed the importance of explaining how funding for NSF and the mathematical sciences impacts the state/district of the Member of Congress. He encouraged participants to use anecdotes to further exemplify the importance of research funding to the Member's state/district. He discussed the fact that there is bi-partisan support for innovation and competitiveness among Members of Congress and how the case should be made for funding for the mathematical sciences in this context.

***David Weinreich
Legislative Assistant, Office of Rep. Bob Etheridge (NC-2)
and former AMS Congressional Fellow***

David Weinreich gave participants practical advice about how to lobby a Member of Congress, how to convey the desired message and what the meeting process would be like. He spoke to such things as being prepared, staying on message and common courtesies such as being on time and saying "thank you." He talked about the process as being an opportunity to build relationships and stressed the importance of follow-up.

Capitol Hill Meetings

The twenty-seven CSP committee members and department chairs attending were divided into thirteen teams for the Capitol Hill visits. Each team had two to three members. Sixty-seven meetings were scheduled by the AMS Washington Office from 9:00am to 5:00pm on Wednesday. Each team had from four to six meetings.

Committee on Science Policy Events at the 2008 Joint Mathematics Meeting

There was much discussion and several ideas were formulated for the CSP related activities at the Joint Mathematics Meetings to be held in San Diego in January 2008. CSP is generally involved in a panel discussion as well as in securing a government speaker at the meetings. It was decided that the committee would only do one or the other this year. The topic and format will be determined later.

Date of Next Meeting

The next meeting of the AMS Committee on Science Policy will be held Thursday-Saturday, March 6-8, 2008 in Washington, DC. The meeting will begin with a reception and dinner on Thursday evening and continue through midday Saturday. A day of Capitol Hill visits may be added, separate from the meeting, perhaps on Thursday before the meeting.

Submitted by Anita Benjamin
American Mathematical Society
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