

**AMS COMMITTEE ON SCIENCE POLICY**  
**Meeting Friday-Saturday, April 20-21, 2001, Washington DC**

**Summary Report**

With around 50 participants at the Friday sessions, this was the largest-ever CSP meeting. Invitees this year included Council members (the Council meeting followed on Saturday afternoon) and several chairs of departments of mathematics at doctorate-granting universities, in addition to traditional visitors from the Administration, Congress, federal agencies and other mathematical organizations.

CSP met at a time when the budget process for FY 2002 was just heating up in Washington (President Bush's detailed budget was only released April 9) and the primary focus of the meeting was to hear and discuss analyses and predictions offered by active players in this process. The overall message for science turned out a hopeful one; several movements were already under way in Congress to increase the small (1.3 percent) increase for NSF requested by the President. Several visitors thought the number would probably not increase by the 15 percent that would continue the progress towards doubling the NSF budget by 2005, but predicted 7 percent as realistic.

**Rita Colwell, Director of the National Science Foundation**, was CSP's keynote speaker. Colwell gave an upbeat interpretation of the President's budget request, saying that although it might sound like a small percentage, it provided several great steps forward for basic science research and education. Specifically, NSF will play a lead role in the President's Mathematics and Science Partnerships initiative, which will provide funding for states and local school districts to join with institutions of higher education. \$8 million will be devoted to increase stipends for Graduate Research Fellowships, Graduate Teaching Fellowships in K-12, and the Integrative Graduate Education and Research Traineeship programs. For FY 2002, a major focus will be a \$20 million increase for Interdisciplinary Mathematics (a 16.5 percent increase, bringing the total investment in mathematics to over \$141 million). Calling it her "mathematical soapbox", she routinely points out that the federal investment in mathematics to date has been surprisingly small, that NSF grants for mathematics are smaller than those in most other fields, and that, since 1992, the number of bachelor's degrees in mathematics has dropped by about 23 percent. NSF's FY 2002 budget emphasizes four areas: Biocomplexity in the Environment, Information Technology Research, Nanoscale Science and Engineering, and Learning for the 21st Century. Colwell gave special thanks to Sam Rankin for his leadership and work with the Coalition on National Science Funding. When asked what CSP could do to help, Colwell replied "deliver the message that NSF can use, and needs, funds in order to invest in science", noting that NSF had fully-detailed plans ready for any increases that might be granted in the future.

**David Radzanowski, Office of Management and Budget**, led CSP through the work of the Administration in building the President's FY 2002 budget, and how mathematics funding played out. Starting by taking out all "earmarks" (programs that were not priorities of the agencies), they added the costs of meeting Bush's campaign promises (tax cuts, etc.) and, after looking at the pace of spending in the past few years (considerably above inflation), and projected revenues for the next ten years, had to make additional cuts. For NSF, the Administration had \$20 million to work with, and ended up putting it into mathematics, which said something about their priorities. Although NSF "didn't get on the agenda" for FY 2002, the Administration will be undertaking a review of NSF in order to come up with sustained funding in future years. Work on the FY 2003 budget will begin in September.

**Congressional visitors** provided insights on developments in the FY 2002 budget.

- **Allen Cutler, Majority Staff Analyst for Science, Space and Technology, Senate Budget Committee** reported that the budget process was at the stage where both the House and the Senate had approved their own budget resolutions (the House version was essentially the Bush budget, but the Senate approved significantly more for science) and a conference committee must within days reconcile the differences before sending the numbers to the Appropriations Committees for dividing up. Thus a short window of opportunity existed in which to mobilize forces in support of amendments that would increase the budget for science – in particular, the Bond/Mikulski amendment to increase Function 250 (non-defense science, space and technology) \$1.44 billion above the level recommended by the President and the House. CSP acted on Cutler's recommendation and drafted a letter which was sent to the leaders and all members of the House Budget Committee (after the meeting an email alert was also sent to CSP, Council, and the AMS contact group, urging individual contacts).
- **Sharon Hays, Majority Staff Director, Research Subcommittee of the House Committee on Science.** Sherwood Boehlert, the new Chair of the House Science Committee, whose three priorities are education, energy, and the environment, has expressed his disappointment with the FY 2002 NSF budget request, and will work hard to see that the numbers reflect the priorities of the Science Committee. She has been reassured by signals from the Administration that, rather than reflecting a dislike of science (or NSF), the small FY 2002 numbers for NSF, and the lack of a science advisor to the President, just reflected the priorities of the President's campaign promises. Hays reminded CSP that the Committee on Science could write reauthorization bills for agencies, but they are merely guidelines for Appropriations Committees, which can ignore them as they carve up what the Budget Committees have allotted.
- **Michael Stephens, Minority Staff, House Subcommittee on Appropriations for VA/HUD/Independent Agencies.** Although the work of Congressional science committees is important to the mathematical community, it is the appropriations committees who cut the actual numbers. A seasoned veteran of appropriations since the 70's, Stephens' message was that there remains tremendous uncertainty about the outcome for FY 2002. The discretionary spending pot, where NSF competes with the likes of VA and HUD, received a healthy increase for FY 2001, largely the result of budget chaos at the end of the fiscal year, rather than a commitment to long-term increases for NSF. Stephens saw more fiscal restraint this year. Because there was such a gap between the Senate budget resolution and the President's, the budget conference could go into a stall and real negotiations not begin until the end of May, which could mean that the details would not be worked out until November (fiscal year 2002 begins October 1). When asked if he saw a potential "white knight", a champion for science, Stephens said the champion must be in the right place, i.e., on appropriations subcommittees.
- **Jim Wilson, Minority Professional Staff, Research Subcommittee of the House Committee on Science.** Another move in Congress is the somewhat unusual introduction by a Democrat (Rep. Eddie Bernice Johnson) of an authorization bill for NSF (H.R.1472). Noting that the bill will go nowhere, because minority bills are not moved by committee, Wilson says this nevertheless lays out the Democrats' disappointment with the President's request, and puts them on record as endorsing the doubling of the NSF budget by 2005. Although there was clearly bi-partisan support for doubling, Wilson noted that the majority leaders have been very successful at keeping their troops in line. However, he predicted that the President's 1.3 percent increase would not hold in the appropriations process.

**Philippe Tondeur, Director of NSF's Division of Mathematical Sciences** presented a different view of the President's budget request for NSF, saying that he thought it inappropriate to make negative comments about the budget at this point because mathematics had been treated very well (DMS is in line for a 16.5 percent increase). In fact, Tondeur urged mathematicians to make the case directly to Congressional appropriators that, because the Administration had already signaled its priorities by singling out mathematics, the \$20 million for mathematics should be increased to \$200 million. "If we don't advocate for mathematics," he said, "who will?" There was a very lively debate on the pros and cons of adopting this (new) strategy of asking Congress for an earmark for mathematics. Tondeur also gave an overview of the DMS priorities in FY 2002, noting that the decline in the number of U.S. citizen mathematics students was of great concern

**Lester Su, Science Fellow for Representative Vernon Ehlers**, (and also an AMS member) updated CSP on the status of the three education bills Ehlers introduced in the 106th Congress. Ehlers chairs the House Science Committee's Environment, Technology and Standards Subcommittee. Last year political machinations doomed the one bill that seemed assured of passage (H.R.100, National Science Education Act, which addresses teacher professional development). This year the climate is uncertain. Of the three bills reintroduced, only H.R.100 has prospects, but Ehlers must be cautious not to "step on Bush's toes" because the President has education as one of his initiatives. However, Chairman Boehlert (House Science Committee) is very supportive and if Ehlers gets the green light, Su expects the bill to get expeditious action. Within the month there would be a clear indication of what the President's education bill will look like.

**Rich Borchelt, Director of Communications in the Department of Energy's Office of Science** gave a spirited presentation on how to communicate science to the public and to policy makers.

**Douglas Cochran, Manager of Applied and Computational Mathematics Program, DARPA** (not an agency that has often sent representatives to CSP) gave a very welcome insight into programs at this "small, flat organization of freewheeling zealots". When asked what AMS could do to help DARPA, Cochran said 1) provide ideas, and 2) encourage mathematicians to become program managers.

CSP members developed a short list of names for the AMS-MAA government speaker at the January 2002 meeting in San Diego, and agreed to sponsor an event tentatively titled "Scientific Frontiers", on themes of nanotechnology, biocomplexity, and national security, with the format to be decided after speakers are committed.

Submitted by  
Monica Foulkes  
AMS Washington Office  
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