## NATIONAL SCIENCE FOUNDATION 4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



October 25, 2000

TO: Major Research Instrumentation Committee of Visitors:

Estela Blaisten-Barojas, George Mason University
Timothy Dixon, University of Miami
William Jackson, University of California-Davis
Edna Kanishero, University of Cincinnati
William Lord, Iowa State University
Michael Leuze, Oak Ridge National Laboratory
Cynthia McIntyre, Rensselaer Polytechnic Institute
Robert Megginson, University of Michigan-Ann Arbor
Howard Nusbaum, University of Chicago
Dorothy Pumo, Hofstra University
Jean'ne Shreeve, University of Idaho
Pao Wang, University of Wisconsin-Madison

FROM:

Director, OIA

SUBJECT:

Response to MRI COV report

On behalf of the National Science Foundation, please accept my thanks for your participation on the Major Research Instrumentation (MRI) Committee of Visitors (COV) in June, 2000. This was the first time that NSF has asked a Committee of Visitors to assess a major crosscutting program such as MRI. Your excellent effort has paved the way for future COV's for similar programs. The report of your findings and recommendations was very well received by the MRI Technical Coordinating Committee and by NSF management. The purpose of this letter is to inform you of our progress in addressing the major recommendations of your report.

In late July, we discussed the findings and recommendations of the MRI COV with the MRI Technical Coordinating Committee. The committee agreed to adopt the COV recommendations to encourage more development proposals and to encourage more proposals from non-Ph.D. granting and minority institutions. In August we presented a summary of your findings and recommendations to the Senior Management Integration Group at NSF, a group chaired by the NSF Deputy Director and including all Assistant Directors of research directorates and selected staff office directors. This group concurred with the coordinating committee's recommendations.

To implement the COV recommendations adopted by the committee and by the NSF senior management integration group, NSF made two important changes in the cost sharing requirements in the program guidelines for the FY 2001 MRI competition. As you may recall,

the FY 2000 and prior guidelines for the MRI program require cost sharing at a rate of 30% of total project cost. Total project cost is the sum of all eligible project costs, including equipment purchase, installation, commissioning, and calibration. Total project cost can also include the direct and indirect costs of operation, maintenance, and technical support during the award period. For development proposals, eligible project costs can also include direct and indirect costs for support of personnel engaged in the instrument development effort. The guidelines also require a minimum proposal of \$100,000, but an exception to this minimum is allowed for non-Ph.D. granting institutions.

The first change in the 2001 program guidelines relates to the calculation of cost sharing for development proposals. The new guidelines require cost sharing for development proposals at a level of 30% of equipment cost, rather than total project cost. Since a significant portion of total project cost for most development proposals is the cost for support of personnel involved in the development effort, this change should provide substantial relief from the cost sharing burden for development proposals. The second change involves cost sharing for non-Ph.D. granting institutions. Most proposals from non-Ph.D. granting institutions are near or below the \$100,000 level for total project cost. In 2001 these institutions will cost share at a level of 30% of total eligible project costs in excess of \$100,000 for acquisition proposals and at a level of 30% of total equipment cost in excess of \$100,000 for development proposals. This change will substantially reduce the cost sharing burden on non-Ph.D. granting institutions and could encourage these institutions to request higher-cost instrumentation with greater potential benefit to research and research training.

It is interesting to note that, at the time of this writing, Congress is moving toward increasing the FY 2001 MRI budget by 50%. It is our understanding that one of the main concerns of Congress is that NSF needs to broaden participation in the program by encouraging increased submission of proposals from small and minority schools.

The COV also raised two other issues that are critically important to MRI and to all of NSF – the extent to which proposers and reviewers address both NSF merit review criteria and the extent to which members of groups that are underrepresented in science and engineering participate in the NSF merit review process. Since these issues impact all NSF programs, the Foundation has addressed them at the agency level through establishment of agency-wide strategic goals and annual performance goals. We now ask all Committees of Visitors across the Foundation to assess whether proposers and reviewers have adequately addressed both merit review criteria. We have also set performance goals for NSF to increase the number of members of underrepresented groups who are hired to the NSF science and engineering staff and to increase the number of members of underrepresented groups who are selected as reviewers.

Finally, NSF is addressing two other recommendations made by the COV. We have included additional information in the FY 2001 solicitation about the success rates for proposals at different cost levels. We have also begun work on a report on the MRI program that will update the 1994 brochure, "Research Instrumentation: Enabling the Discovery Process." This report will be published electronically and will be available on the NSF website early in 2001. NSF expects to implement at some level most of the other recommendations made by the COV. The NSF research directorates will also take into account in future MRI competitions many of the comments included in the COV report.

Thank you again for serving on the Major Research Instrumentation Committee of Visitors. I hope this report lets you know that your advice does make a difference. If you have any questions, please feel free to contact either Joe Burt or me on (703) 292-8040.

Nathaniel G. Pitts

Cc: MRI Technical Coordinating Committee

Lorretta Hopkins, OIA Patricia Butler, Westat