
For Your Information

Three NSF Institutes Pass Five-Year Renewal

In 2005 three of the U.S.-based mathematics institutes funded by the National Science Foundation (NSF) cleared a major midterm funding hurdle and had their grants renewed for another five years. The three institutes are the Institute for Mathematics and its Applications (IMA) at the University of Minnesota, the Institute for Pure and Applied Mathematics (IPAM) at the University of California, Los Angeles, and the Mathematical Sciences Research Institute (MSRI) in Berkeley. Despite budgetary pressures on the NSF's Division of Mathematical Sciences (DMS), all three institutes received increases.

IMA and MSRI were the two original institutes funded by the DMS back in 1982. In 1999, the DMS opened a new competition for institute proposals. IMA and MSRI were required to compete anew to retain their grants, and they were successful in gaining renewal funding. The DMS also chose at that time to launch IPAM. The three institutes were put on a ten-year funding cycle, with a major review scheduled for 2005, the halfway point in the cycle.

Starting in 2000, the DMS budget began an ascent that led to a 72-percent increase (in constant dollars) over five years. In this positive budget climate, the division issued in 2001 another call for proposals for mathematics institutes and in 2002 funded three additional institutes: the American Institute of Mathematics Research Conference Center in Palo Alto, the Mathematical Biosciences Institute at the Ohio State University, and the Statistical and Applied Mathematical Sciences Institute in Research Triangle Park. At the same time the NSF also made a large continuing award to the School of Mathematics at the Institute for Advanced Study.

Further large increases were planned for the DMS, but those plans fell by the wayside as the NSF budget flattened, due to increased pressures on the federal budget overall. In fiscal year 2005 the NSF actually took a cut in budget, and the DMS received a zero increase. When fiscal year 2005

began in the fall of 2004, rumors circulated that the DMS might eliminate one of the institutes, but that danger seems to have passed for now. Nevertheless, the bleak outlook for the NSF budget as a whole means that the budget stringency in the DMS is not likely to be relieved soon. The DMS has therefore begun to examine more closely everything that it funds, including the institutes.

The DMS has called upon the institutes to make greater efforts to ensure participation in their programs by a broad swath of the mathematics community. This means including not only more women and members of minority groups, but also more mathematicians from non-elite institutions. As DMS director William Rundell explained it, there is no way that the DMS, with its present budgetary outlook, can hope to give individual grants to a sizeable fraction of all the mathematicians who are doing quality research. But the DMS can offer a broader segment of this group the possibility of participation in institute activities. (Additional details about the future of the NSF-funded institutes may be found in "The Mathematical Science Institutes" by William Rundell, *Notices*, October 2005, pages 1052-1054.)

IMA received a renewal grant totaling US\$19.5 million over five years, which is the largest single research grant in mathematics ever made by the NSF. With this renewal, the IMA's annual budget will rise 77 percent, to US\$3.9 million. Rundell explained that the IMA has been highly successful and was "clearly underfunded". IPAM also saw a sizeable rise in its annual budget, from US\$2.2 million to US\$3.4 million, an increase of 55 percent. MSRI's budget increased slightly, from US\$3.4 million to US\$3.5 million annually. At the same time as these renewals were made, the DMS renewed a grant that provides partial support, US\$0.5 million per year, for the Banff International Research Station in Banff, Canada.

—Allyn Jackson