

Director's Statement

It is with great pleasure that I forward NSF's first annual performance report, as required by the Government Performance and Results Act of 1993 (GPRA).

The last fifty years have been a remarkable journey for NSF and for science and engineering in the United States. Our investments — in creative people, in innovative ideas, and in cutting-edge research and education tools — have led to science and engineering achievements that have literally transformed society. NSF-supported activities have played a key role in advancing the microelectronics industry, in leading to a better understanding of the structure and properties of DNA, in developing information-communications technologies, such as the Internet, and in revolutionizing our knowledge of the cosmos and humanity's place in it. NSF-supported researchers have been awarded over one hundred Nobel Prizes in physics, chemistry, physiology, economics, and other fields. These are just a few of the many excellent examples of NSF-supported research and education activities that have had a profound effect on society. In commemoration of our 50th anniversary, we are compiling examples of societal achievements that were made possible by NSF support. This compilation, which will be published and placed on our website later this year, together with this and future GPRA performance reports, will bring into sharper focus the value of NSF investments in science and engineering research and education to society.

This first full year of GPRA implementation has been a learning process for NSF and other federal agencies whose missions involve fundamental research and education activities. The substance and timing of the outcomes of these activities are unpredictable and not easily quantified. In addition, there is the critical issue of timing. Attribution of the societal impacts of NSF awards is often difficult to report on an annual basis because such impacts often occur decades after the initial investments were made. In order to provide an accurate and reliable depiction of the effectiveness of NSF's activities, we developed and obtained approval from the Office of Management and Budget for an alternative GPRA format that takes into account the special challenges inherent in assessing research and education results.

This alternative format, which uses the judgment of independent expert review panels, enables the assessment of the Foundation's performance in three key areas:

- ☞ the outcomes of NSF investments;*
- ☞ the effectiveness of NSF's investment process; and*
- ☞ the value of management activities.*

Outcome goals focus on the long-term results of NSF's grants for research and education in science and engineering. Investment process goals focus on the means and strategies NSF uses to achieve its outcome goals. And, management goals address the efficiency and effectiveness of our administrative activities in support of NSF's mission. Once these assessment goals were determined, NSF put in place new processes and procedures, data collection systems, and committees to measure our performance.

This FY 1999 GPRA performance report affirms NSF's tradition of accomplishment. I am proud to report that NSF was successful in meeting all of our outcome goals, and we met 12 of the 18 investment process and management goals. Altogether, we were successful in meeting 78% of our goals. The goals that were not met include the length of time NSF takes to process proposals and the timing of program announcements. We will renew our efforts to meet these goals in FY 2000.

In the new century, NSF remains committed to ensuring the health and vitality of the U.S. science and engineering enterprise. We face daunting challenges and rich opportunities: responding to emerging developments at the frontiers of science and engineering, broadening participation by all members and regions of our nation, strengthening the connections between scientific discovery and technological innovation, modernizing the nation's research and education infrastructure, and positioning the United States to benefit from global investments in science, engineering and technology. I have little doubt that the strategic and performance planning process implemented through GPRA will help NSF meet future challenges and make the most of our opportunities, leading to 21st century science and engineering achievements that will further transform society.

Rita R. Colwell

Director

National Science Foundation