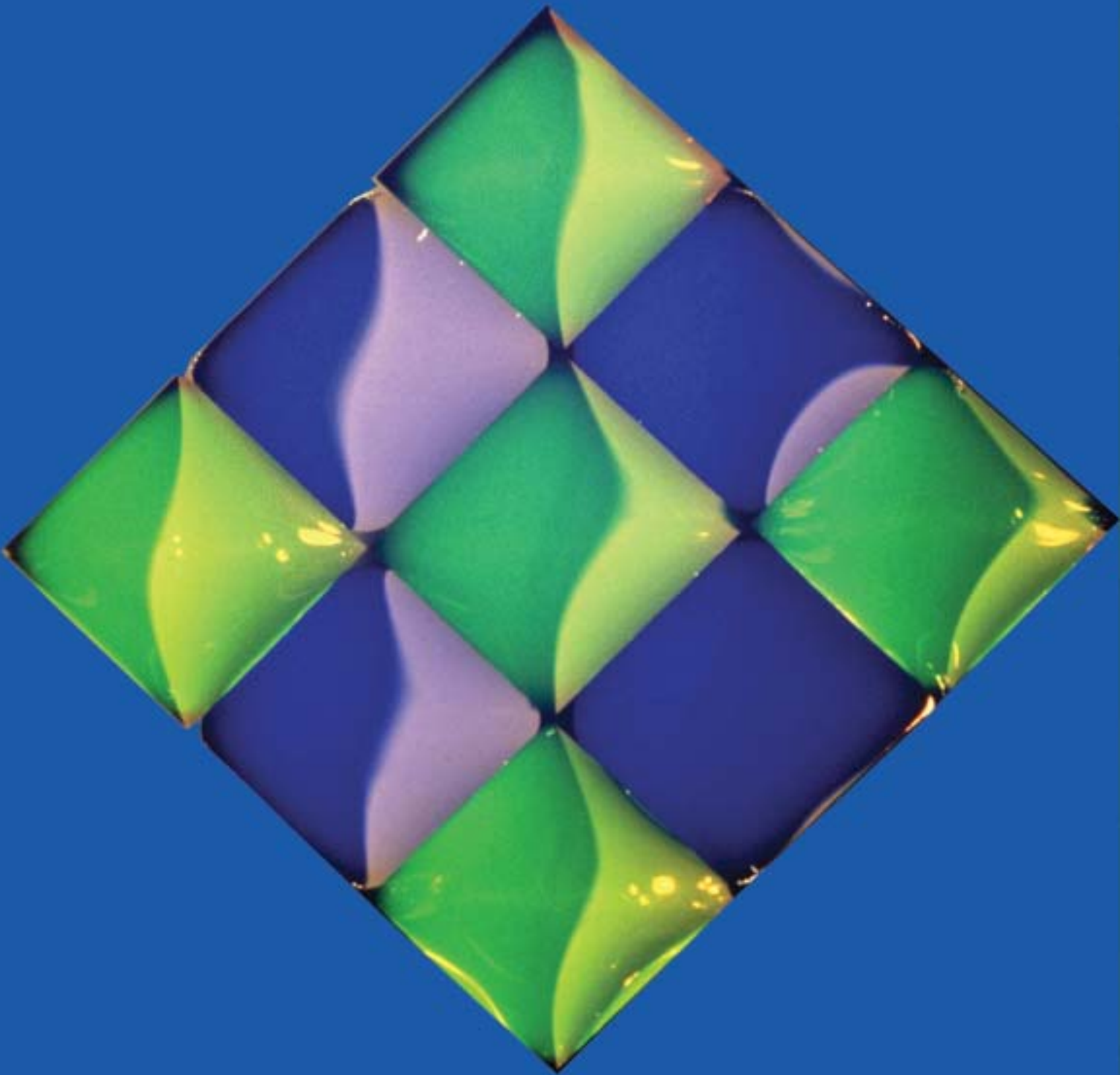


National Science Foundation



FY 2003
Performance **HIGHLIGHTS**

On the Cover. Felice Frankel photographed colored drops of water in the laboratory of Harvard chemist and National Medal of Science winner Professor George Whitesides. The water drops are responding to a grid of hydrophobic and hydrophilic materials on a flat surface. The water drops take squarish shapes by spreading across the hydrophilic surface and stopping at hydrophobic gridlines etched at 3 mm intervals. The hydrophilic surface is a self-assembled monolayer.

Frankel is a research scientist in the School of Science at the Massachusetts Institute of Technology (MIT). In 1997, she was awarded an NSF grant for “Envisioning Science,” a project in which she works with students and researchers to raise the standards in scientific imaging and visual expression of data. In March 2002, the MIT Press published her book, *Envisioning Science: The Design and Craft of the Science Image*. *Envisioning Science* provides a guide to creating compelling photographs that illuminate science and make research more accessible.

© Felice Frankel, from *Envisioning Science: The Design and Craft of the Science Image* (The MIT Press).

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*“The value of science in our society today
is beyond calculation because it is so
intricately and pervasively
woven into the nation’s
fabric.”*

Dr. Rita R. Colwell
NSF Director

FROM THE DIRECTOR

I am pleased to present the National Science Foundation's (NSF's) fiscal year (FY) 2003 *Performance Highlights*, the third annual summary report on the Foundation's financial condition, core business activities, and primary programmatic accomplishments over the past year.

For more than 50 years, NSF has invested in a wide range of research and education programs in fundamental science and engineering. These investments have generated discoveries and advances in science and engineering that have enhanced every facet of our lives—from computing and communications to transportation, national security, the arts, architecture, design, and countless other areas.

Today, the progress of science and engineering is not only more central to our lives, but it has also taken on new dimensions of complexity and integration, making NSF's role both more vital and more challenging. Advances in science and engineering are integral to strengthening the nation's economic future and meeting the challenge of securing the homeland and reducing international threats of all types. As an example, computer researchers around the Pacific Rim were mobilized in May 2003 to fight the SARS (Severe Acute Respiratory Syndrome) epidemic, helping to establish a cutting-edge communication grid among quarantined hospitals across Taiwan. In addition to linking the hospitals to each other, the grid connected doctors to global sources of health information. NSF's support for the PRAGMA (Pacific Rim Applications and Grid Middleware Assembly) partnership that responded to this call for help from Taiwan's National Center for High-Performance Computing has fostered a spirit of trust and cooperation among the sites. Clearly, NSF investments transform not only scientific research and learning, but the handling of critical global events as well.

Underlying the Foundation's programmatic achievements is NSF's commitment to organizational excellence and sound financial management. In FY 2003, NSF received an unqualified "clean" audit opinion on its financial statements for the sixth consecutive year. The Foundation also continued to provide leadership in achieving government-wide goals under the President's Management Agenda. NSF remains the only agency to achieve two "green" successful ratings—for financial management and E-government—and this year advanced to "yellow" status for budget and performance integration. Last spring the U.S. General Accounting Office identified the Foundation as one of five exemplary federal agencies that successfully demonstrated evaluation capacity in their performance reports due to its evaluation culture, data quality, analytical expertise, and collaborative partnerships.

Here at NSF, it is our job to ensure that U.S. capabilities are the best in the world and that the returns meet the highest expectations of the American people, who support these activities with their tax dollars. The dedication of the outstanding staff at NSF makes achieving this goal possible.



Rita R. Colwell
Director

Dr. Rita R. Colwell
December 2003



Statutory Mission

To promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense.

Vision

Enabling the nation's future through discovery, learning, and innovation.

NSF investments—in people, in their ideas, and in the tools they use—will catalyze the strong progress in science and engineering needed to establish world leadership and secure the nation's security, prosperity, and well-being.

NSF

FROM THE CHIEF FINANCIAL OFFICER

FY 2003 was a successful and very busy one for the Foundation. I am pleased to report that for the sixth consecutive year, NSF's financial statements received an unqualified "clean" opinion from an independent auditor. Moreover, NSF prepared its 2003 statements in 45 days—meeting the government-wide deadline a year earlier than required. Sound financial management is critical for any organization; for NSF, it underlies and enables the programmatic achievements essential to ensuring that America remains at the frontier of science and engineering research and education.

NSF is committed to the highest standards of management efficiency and integrity. Our goals are to make transactions with our stakeholders more user-friendly, increase the efficiency of our internal operations, and provide real-time financial and management information and reporting for decision-making purposes. Among our achievements this year are the following:

- NSF remained the only federal agency to process all of its proposals electronically.
- With respect to customer service, despite a record 14 percent increase in the number of proposals received—over 40,000 of them—nearly 80 percent of award decisions were made within six months of receipt.
- Nearly 90 percent of the Foundation's funds support projects reviewed by external peers and selected through a merit-based competition.
- The re-engineered business practices implemented in recent years continued to yield cost efficiencies for the Foundation in FY 2003.
- Accountability to the taxpaying public is a responsibility that ranks among the most important here at the Foundation. For the second consecutive year, our annual *Highlights* report was rated as among the top 10 in a national review that included most of the Fortune 500 companies.

Thanks to sound financial management, a commitment to continuous improvement in business practices, and, most important, the extraordinary talent and commitment of our staff, NSF continues to face the future in a position of operational strength. Rather than reacting to change, we are committed to leading change and setting new standards of excellence for the federal financial community. We look forward to achieving many more milestones in the years ahead.



Thomas N. Cooley
Chief Financial Officer

A handwritten signature in black ink that reads "Thomas N. Cooley". The signature is written in a cursive, flowing style.

Thomas N. Cooley
December 2003