

PREFACE

The quest for new frontiers over the last half of the 20th century has increased our Nation's prosperity, created vast new areas of economic activity, and improved the quality of our lives. The systematic pursuit and exploitation of new knowledge, through small steps and transcendent leaps, has built a solid foundation for the future. Through its stewardship of the National Science Foundation and its advice to the President and Congress on science and engineering policy, the National Science Board has been a vital contributor to the astounding progress in science and technology we have witnessed during the past 50 years.

The Board was established by an Act of Congress in 1950 to serve as the independent governing board of the National Science Foundation. The framers of the 1950 Act insisted that the Foundation be run by those who understood science firsthand. The National Science Board consists of twenty-four men and women and the Director of the National Science Foundation—eminent scientists, engineers, and educators—who guide the work of the government's fundamental science and engineering research agency. This diverse, rotating cast of members from large and small academic institutions, various disciplines and regions of the country, foundations, and private industry provide their time and expertise to ensure that America's investment in the future remains strong.

On the occasion of the National Science Board's fiftieth anniversary, we celebrate an institution that has helped chart a course toward and through some of the world's most challenging advances in knowledge. This brochure, a "history in highlights," offers snapshots of key moments chosen for their national impact and for the insight they provide on the values and principles that guide the inner workings of the Board in its governance of the National Science Foundation and in its national policy role.

The relationship between the Board and the Foundation is distinct among government research agencies. Indeed, the Board's second Chair, Chester Barnard, president of the Rockefeller Foundation, used to refer to the Board as "this peculiar organization." The singular partnership between the Board and the Foundation has been largely responsible for creating in the United States what is the world's most vibrant and fruitful research environment.

If in the 20th century science and technology moved toward center stage, in the 21st century they will command it. Our quality of life will depend in large measure on our Nation's ability to generate new wealth, safeguard the health of our planet, and create opportunities for enlightenment and individual development. The contributions of research and education in science and engineering make possible advances in all these areas.

As we embark on a new century where research has become global and the need for cooperation and innovation has never been greater, we pause to remember the many distinguished men and women who have contributed so much to the Board's and Foundation's success and honor their work. We hope these highlights from the history of the National Science Board illuminate not just where science has been, but also the principles of excellence, independence, and public service that will enable us to meet the grand challenges ahead.

Eamon M. Kelly, Chair
National Science Board

Acknowledgements

Many colleagues brought this publication to life. I wish to thank, on behalf of the entire Board, the members of the NSB 50th Anniversary Task Force, including former members Sanford Greenberg and Eve Menger, who, in creative alliance with Low+Associates (L+A) and the NSB Office staff, produced this commemorative booklet. We are particularly grateful to researcher and principal author Deborah Shapley; to L+A project directors Terry Savage and Nan Russell, and their staff for the outstanding design and layout of the publication; and to the NSB Executive Officer Marta Cehelsky, Senior Policy Officer Daryl Chubin, and Task Force Executive Secretary Susan Fannoney. Their stewardship, keen eye, and attention to tone and detail were vital in executing the rigorous external review process sought by the Task Force. Such exemplary teamwork has sustained the National Science Board throughout its 50-year history.

Many associated with the Board, too numerous to mention individually, contributed to this document. Some participated in phone and in-person interviews conducted by Ms. Shapley. Others graciously submitted personal recollections, comments, and artifacts that were used in shaping the narrative of the booklet. Special thanks go to former NSB Chairs Herbert Carter, James J. Duderstadt, Mary Good, Norman Hackerman, Frank Rhodes, Roland Schmitt, and Richard Zare; former NSB members Charles Hess and Shirley Malcom; and former NSF Directors H. Guyford Stever and Erich Bloch. NSF Director Rita Colwell provided attentive review of the document as a participant-observer of the last 15 years of NSB history. In addition, long-time "consumers" of Board actions – J. Merton England, Patrick Windham, and Wil Lepkowski – provided important reactions to a draft of the text, as did NSF staff members William Blanpied, Mary Clutter, Patricia Garfinkel, and Curt Suplee.

While none of us has a definitive view of the past, together we have fashioned a document that captures both the public and behind-the-scenes interactions that endowed the National Science Board with a unique place in the history of U.S. science policy and practice. The NSB web site <www.nsf.gov/nsb> will proudly display the text and supporting documentation for the commemorative booklet.

Again, many thanks to all whose time and generosity made this effort so successful.

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Chair, Task Force on NSB 50th Anniversary

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