



The Future of NSF On Its 60th Anniversary

Experience provides guidance for the future. At a major milestone in the history of the National Science Foundation (NSF)—the 60th anniversary of the Foundation and the National Science Board—the past and present leaders of NSF for the last 25 years reflected upon their experiences and offered advice about possible future directions for the agency. The current and four former directors of NSF joined Dr. Steven Beering, chair of the National Science Board, and Board vice chair, Dr. Patricia Galloway, on Feb. 20, 2010 at a symposium at the American Association for the Advancement of Science (AAAS) annual meeting in San Diego, Calif., to see what lessons could be learned from history and to provide recommendations on how NSF can continue to ensure American global leadership in science and engineering.



Each of the presenters reflected on his or her particular history at the NSF and the issues that were most significant at the time although certain themes were common to all the presentations. Using an analogy of the launching of Sputnik in 1957, which panicked the American people and led to a massive infusion of funding for NSF (and American science and technology in general), Dr. Rita Colwell, NSF director from 1998 to 2004 and the first speaker, established two major themes which were echoed, with variations, by the succeeding presenters. One was that increased investment in science and engineering research was necessary for the economic well being and international competitiveness of the United States. She identified the infusion of funding by the Chinese in particular, and Asia in general, as the “silent Sputnik.” Secondly, tied to this challenge was the necessity of NSF to solve one of the most difficult and continuing challenges it has faced: to provide the nation with a scientifically literate workforce by improving science education, especially at the kindergarten through 12th grade levels.

Succeeding speakers introduced new topics and reiterated those already mentioned by their fellow former directors. Only a few will be highlighted here. Mr. Erich Bloch, NSF director from 1984 to 1990, reminded the audience of importance of NSF’s status as an independent agency, a point echoed by other speakers. He also pointed to the increasing importance of multidisciplinary and interdisciplinary research and posed the question of whether the NSF might have to reorganize in the future in response. Dr. Neal Lane, NSF director from 1993-1998, praised NSF for funding basic research while considering societal applications. Lane felt that the future was bright for NSF, but warned that increased funding means increased expectations. Dr. Walter Massey, NSF director from 1991 to 1993, reflected on the work of the National Science Board’s Commission on the Future, which convened during his tenure, and reminded the audience of the role of the Board in influencing national science and technology policy. The formal presentations concluded with that of Dr. Arden Bement, NSF’s current director, who praised the Foundation for managing the difficult balance of both learning from the university community while being a leader in science and engineering. He looked forward to a Foundation more heavily engaged in international research collaborations.

Following the formal presentations, there was a spirited discussion, led by Dr. Beering, in which both the panel and the audience expanded upon themes introduced in the presentations, including global engagement and science education.

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