

# Book Review

***Science, Money and Politics*** by Daniel S. Greenberg (The University of Chicago Press, 2001) 530pp., ISBN: 0-22630634-8; \$35.00 (hardcover)

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A good starting point from which to begin the study which is this book's subject is Vannevar Bush's 1945 book "Science, The Endless Frontier," in which he proposed that the federal government assume financial responsibility for the postwar support of science. Indeed, it is generally believed that Bush's book provided the blueprint for the making of national science policy. However, in this thoroughly researched and entertaining book (because of its irreverent iconoclasm), Daniel Greenberg, documents the intricate politics which led to a final outcome such that "Bush felt he had given birth to an orphan and had little to do with it." Or, to put it another way, Bush may have turned on the ignition, but he was denied access to the steering wheel.

Further mixing metaphors, this represents only one of many balloons which Greenberg gleefully shoots down. Again and again he demonstrates that we should view with extreme skepticism the pronouncements of official spokesmen concerning federal support of science. For instance, the National Science Foundation warned of a shortfall in Ph.D. production when, in fact, a glut existed, and Greenberg explains why and how this happened. Another example is that at the end of the Cold War, "The predominant collective line, in defiance of fact, [was] that federal support of science wilted ... and its revival [was] impeded by public ignorance." In fact, "federal support for basic research in total [rose], albeit slowly, since 1989, and federal support for academic basic research actually increased slightly faster-in the post-Cold War period than in 1970-89." And Greenberg points out the complete lack of correlation between the public's admitted ignorance of science, and governmental support for science. The enormously expensive Superconducting Super Collider (SSC), concerning whose operation and value few of us can claim expertise, received funds far in excess of those awarded projects (e.g., fighting "popular" diseases) whose significance was much clearer to most of us. That is, until vast cost overruns, and a realization by Congress that the promised international collaboration in paying for it had never been a realistic hope, caused it to be finally shot down.

But, you don't need me to review this book, In an Epilogue, Greenberg makes the following bulleted points, each of which he has thoroughly bolstered with extensive documentation, including many interviews;

“The psyche of science is touched, and scientists are often energized by magical thinking and voodoo misperceptions of plain matters of fact in the political history, financing, and public acceptance of science.”

“Many important institutions of science are bureaucratically calcified, financially insecure, and risk-averse.”

“An infinity of researchable topics renders science insatiable for money and increasingly indiscriminate in ways to get it.”

“Within the metropolis of science, the academic core shuns conventional politics while vigorously employing non-electoral techniques for obtaining government money, the denial of which it attributes to public and political ignorance and hostility.”

The sole exception to the last point was the “large-scale involvement of scientists in national politics [which] took place in the presidential campaign of 1964, under the banner of *Scientists and Engineers for Johnson- Humphrey*. When the scientists successfully completed their political work in that campaign, many of them feared they had damaged the sanctity of science. Never again in significant numbers did science return to ballot-box politics.” Instead, lobbying is the order of the day, with universities spending large sums on lobbying to obtain vaster sums in the form of earmarked grants, exempt from the sieve of peer review. And, when budgets are being drawn up, our own American Chemical Society enthusiastically participates in lobbying for increased funding for science, both on its own and as a member of the Intersociety Working Group, which is orchestrated by the AAAS. In the chapter on “The Sciences’ Way of Politicking” the ACS comes in for special mention, both for its use of sophisticated email technology for lobbying and for the pay of its Executive Director, John Crum, who has the highest salary listed in the book for such a post, and, I believe the highest salary listed in the book for any post. In 1996, he received a salary of \$574,073 plus benefits of \$34,900, while in 1997, the figures were \$600,000 and \$36,510 respectively. I thought you’d like to know.

*Editor’s comment: In order to put Dr. Crum’s salary in the correct perspective, it should be realized that the ACS has an operating budget close to 400M\$/year and the Executive Director is the CEO of this corporation. The ACS therefore has to offer its CEO a remuneration compatible with that offered by corporations of similar size. In addition, being a non-profit organization, the ACS cannot offer stock options, which often are a major part of the emoluments at stock-based companies.*