



The National Institutes of Health, 1991–2008

John A. Kastor

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The NIH has played a pivotal role in shaping biomedical research into the remarkable success that it is today, through both its intramural program and its generous funding of extramural biomedical science. If you think you know the NIH, you will likely still learn much about it from John A. Kastor's new book, *The National Institutes of Health, 1991–2008*, which should be required reading for anyone with an interest in this organization that has been so central to biomedical research.

While the book purports to focus on the years 1991–2008, it frequently retreats back in time to critical periods as the NIH evolved into the institution it is today. The book covers the intramural and extramural programs, addresses the complex structure of the NIH, and describes many of the key leaders, here focusing more on recent times. It describes most of the key controversies, though admittedly not with the depth or entertainment value desired by those in search of exciting discord.

Kastor is an accomplished medical historian who has diligently uncovered the facts underlying the history of the NIH. As he notes, his goal is to describe "how the NIH operates, its problems, its finances, its politics, and its structure within the federal government." The book includes interviews with a myriad of individuals, most of whom have strong, well-informed opinions regarding what is right and wrong with the NIH. The major strength of the book is that it provides a broad and thorough description of the NIH, its history, its organization, and

the many critical people who have served there. The issues surrounding the Intramural Research Program are perhaps the most interesting. During the Vietnam War, universities did not have academic programs that could compete with those at the NIH, and a whole generation of outstanding young researchers joined the intramural program for training. Whether they went to the NIH for superior training or to avoid service in the Vietnam War, the result was that the intramural program defined future biomedical science through these investigators and through their legacy, the researchers who subsequently trained in their labs. But is there a need for the intramural program today? Universities now have well-developed research programs, there is no draft, and the intramural program is not attracting the scientists it once did. This is compounded by limits on compensation, severe budget cuts, and conflict-of-interest rules that all contribute to make universities a more welcome place for the biomedical researcher.

The future of the intramural research program is just one of many controversies that are addressed in Kastor's book. Should there be a graduate school at the intramural program? Should institute directors yield greater power to the director of the NIH? Was Elias Zerhouni's Roadmap a heroic attempt to insure that the NIH serves its constituency, the American public, or was it just another assault on the R01-supported investigator? Should the NIH fund institute-directed big science, or should it stay focused on supporting the

ideas of researchers through investigator-initiated grants? Should the NIH support clinical research, or should it focus on basic research, leaving the former for industry? Are conflict-of-interest rules overly strict or too lenient? Do they undercut the ability of the NIH to attract the best talent, or are they needed to maintain the trust of the public? Then there are the personal scandals that would be expected to occur at any institution as large as the NIH. Kastor covers all of these controversies in an objective fashion, never expressing personal opinions or bias. Though fair, the evenness of his tone frequently leaves the reader wanting something more lurid.

At times the book gets a little dry, especially as it reviews the structure of each of the institutes and centers, but even here there is much useful information, and the descriptions of the institutes with which the reader has personal experience are of interest.

The NIH has undoubtedly been a driving force in shaping the biomedical research industry in the United States. However, budgets have been relatively flat for a number of years, the future is uncertain, and the American biomedical research enterprise is at great risk. How Congress funds biomedical research and how the NIH chooses to manage the funds it receives will determine whether the United States maintains its preeminence in this arena. For those interested in following or influencing these events, *The National Institutes of Health, 1991–2008* should be required — and largely enjoyable — reading.