

## BOOK REVIEWS

**THE TRUTH ABOUT THE DRUG  
COMPANIES: HOW THEY DECEIVE US  
AND WHAT TO DO ABOUT IT**

By Marcia Angell. 305 pp. New York, Random House, 2004.  
\$24.95. ISBN 0-375-50846-5.

**I**N THIS BOOK, HER MOST RECENT, MARCIA Angell explores pharmaceutical research, deplores the rapidly expanding involvement (and distortion of truth) of Big Pharma, and implores us all (physicians, patients, politicians) to do something about it. The dust-jacket blurb asserts that Angell, “during her two decades at [the *Journal*] had a front-row seat on the growing corruption of the pharmaceutical industry.” Perhaps, but since leaving the *Journal*, she’s gone behind the curtains of Big Pharma, Big University, and Big Faculty. Drawing on her own work and on her thoughtful analysis of research, company financial statements, and investigative reports into drug development and marketing, Angell writes with the unambiguous and unyielding style that *Journal* readers came to expect and trust.

By Angell’s account, the current slide toward the commercialization and corruption of clinical research coincided with the election of President Ronald Reagan in 1980 and the passage of the Bayh–Dole Act, a new set of laws that permitted and encouraged universities and small businesses to patent discoveries from research sponsored by the National Institutes of Health (NIH). Research paid for by the public to serve the public instantly became a private, and salable, good, one that is producing drug sales of more than \$200 billion a year.

Commercialization had both specific and broad effects. Readers of this journal and others are familiar with investigations into the control that research sponsors at pharmaceutical companies exert on the design and analysis of clinical trials (including the distortion of primary outcome measures in trials) and the issue of reporting, nonreporting, and biased reporting of results. Angell reminds us of the increasingly cozy relationships between big industry and the faculties of universities. Not only are narcissistic donors renaming the medical schools; they

are buying access to the best minds of their faculties. Angell’s examples of the large consulting fees paid by industry to individual faculty members and to NIH scientists and directors are astounding.

The broader effects are felt in the commercialization of universities, medical faculties, and our profession. In 2000, in a letter written in response to Angell’s *Journal* editorial, “Is Academic Medicine for Sale?” a reader supplied the answer: “No. The current owner is very happy with it.” The increasing intrusion of industry into medical education and the almost complete domination of continuing medical education (especially regarding drugs) by the marketing departments of large pharmaceutical companies are a scandal.

The same companies also spend heavily to lobby governments. According to Angell, Pharmaceutical Research and Manufacturers of America, the pharmaceutical industry’s U.S. trade association, has “the largest lobby in Washington,” which in 2002 employed 675 lobbyists (including 26 former members of Congress) at a cost of more than \$91 million. The result has been above-average growth in corporate profits during both Republican and Democratic administrations. The most recent and (at least to observers outside the United States) perplexing lobbying effort caused Congress explicitly to prohibit Medicare from using its huge purchasing power to get lower prices for drugs, thus opening up a dollar pipeline, in the form of higher drug prices, directly from taxpayers to corporate coffers. These changes, along with the cave-in by the Food and Drug Administration (FDA) in 1997 that permitted direct-to-consumer advertising to bypass mention in their ads of all but the most serious side effects, have further augmented profits. The overall effect has been a corruption not only of science but also of the dissemination of science.

Angell documents that, contrary to what they claim, large pharmaceutical companies have “paltry output” in innovative research. In fact, as permitted by Bayh–Dole, pharmaceutical companies buy discoveries coming out of the basic-science enterprises, including universities and publicly funded granting agencies. The real costs of research on

drugs by pharmaceutical companies are much less than the oft-quoted \$800 million or so per new drug brought to market. Most of their research is on me-too drugs — unoriginal, tax-deductible (and thus paid for in lost taxes by the public), and mostly unnecessary, except for corporate profits and executive bonuses. The Big Pharma companies are, in essence, manufacturing and marketing companies.

Angell's concluding chapter, the least convincing one in an otherwise fascinating and penetrating book, contains the solutions, all of them predictable (and probably unattainable): control me-too drugs, re-empower the FDA, oversee Big Pharma's clinical research, curb patent length and abuse, keep Big Pharma out of medical education, make company financial statements transparent (so we can tell what the costs of research really are, as distinct from marketing), and impose price controls or guidelines. Granted, the problems are so prevalent and the corporate tentacles so entwined with our way of being that it is hard to see what else to recommend.

But perhaps Angell is right. We must change the way we manage research and the development and distribution of new drugs. Not only are health and health care at risk, but so are the research enterprise and the reputations of universities and governments. The integrity of scientific research is too important to be left to the invisible hand of the marketplace.

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### THE GREAT PLAGUE: THE STORY OF LONDON'S MOST DEADLY YEAR

By A. Lloyd Moote and Dorothy C. Moote. 357 pp., illustrated.  
Baltimore, Johns Hopkins University Press, 2004. \$29.95.  
ISBN 0-8018-7783-0.

**P**LAGUE KILLED MILLIONS, QUICKLY. IT terrified communities, families, and individuals. Plague put enormous pressure on social cohesion and economic activities. Beginning at the time of the Black Death, from 1347 to 1352, plague repeatedly visited Europe's populations until it died down in the 18th century. At each visitation of the deadly disease to a particular area, some 20 percent of the population died — less than the devastation

of the Black Death (which killed one third to one half of the populace), but still a catastrophic event. In England there were successive "Great Plagues," the most famous being the last one, in 1665.

In this excellent book, husband and wife Lloyd and Dorothy Moote, a historian and a biologist, respectively, have brilliantly captured the human, medical, and political dimensions of the Great Plague in London and the surrounding areas. They have succeeded in combining meticulous historical research and scholarship with an account of the plague that is full of human interest. Using the letters, diaries, and manuscripts of the famous (Samuel Pepys) and the obscure (apothecary William Boghurst), the authors convey the all-consuming fear of plague. They show how individuals and families responded to the dilemma of staying or fleeing. Flight, rather than medical measures, had been the preferred option ever since the Middle Ages. But flight left property and goods open to theft. Moreover, the poor, who also figure large in the book, often could not flee. They usually had no savings, and at a time of plague many of them became unemployed and destitute. Flight into the countryside with no money often meant being harried away from farms and villages by country people who were anxious to avoid contagion, so the runaways faced starvation and a lonely death.

The administrative structure of London just about held out. Parish clerks stayed at their posts and compiled the bills of mortality that week by week listed the number of deaths from plague. In April 1665, 2 deaths were recorded; by August, there



*Die Seuche*, a Depiction of the Plague, by A. Paul Weber, 1950s.

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