conceived in market terms. Certain segments engaged in new entrepreneurial activities because of two primary factors: government policy changes that “encouraged universities to treat academic science as an economically valuable product,” and a more general acceptability of a view of scientific and technological innovation as “engines of economic growth” (p. 2). Berman begins her account in the postwar period when a surfeit of funding flowed from an assortment of federal agencies to all corners of the scientific research establishment. She then traces the changing institutional environment of academic science research through the difficult economic climate of the 1970s and 1980s.

The book does not read like a typical history, at least not one with a traditional narrative form. What Berman offers, rather, is a three-part, analytical case study that supports an explanation rooted in the idea of competing institutional logics. The logic of science, she asserts, with a considerable network of secondary support (in which science was supported by the public for its own sake with little external control over its direction or concern as to its immediate utility), predominated during the 1950s and 1960s. This logic was supplanted—though never completely eclipsed—by a market logic that valued new forms of intellectual property rights and free exchange as the most effective means of advancing individual and collective prosperity.

Berman identifies a variety of specific policy decisions and historical events and trends that contributed to the ascendance and spread of her three academic-science practices, including technological breakthroughs in the biotechnology field, changes in tax policies, the passage of the Bayh-Dole Act in 1980 (enabling universities to retain the intellectual property rights of federally funded research), court decisions (allowing the patenting of micro-organisms), and state funding of university-industry research centers. Berman argues that though seemingly unrelated on the surface, these various government policy initiatives were united by the belief that each would contribute to technological innovation and that innovation, following the profound economic downturn of the 1970s, would be crucial to economic recovery and growth. Berman’s conclusion, where she reflects on the rise of neoliberalism, market thinking, and economic rationalization, is particularly thoughtful.

Creating the Market University succeeds in providing detailed, on-the-ground descriptions of the diverse decisions and events that worked together to create what amounts to a new social compact with academic science. Whether the careful analysis of these events constitutes a satisfying explanation is an open question—seeing a clear account of the “why” in the thicket of the “what” is something of a challenge. Nonetheless, this is a valuable work that offers significant insights into how science in the academy arrived at where it is today.

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doi: 10.1093/jahist/jas566


The modern American clinic—like the modern American automobile, newspaper, telephone, or university—has been steadily infiltrated by computers over the past half century. Indeed, as Joseph November points out in the introduction to Biomedical Computing, both the Obama administration and solidly Republican states such as Utah have pinned their hopes for reducing health care costs on a wholesale computerization of medical practice. Yet not long ago science policy makers, life scientists, and physicians were less sanguine about the computer’s role in medicine. In this finely drawn, much-needed study, November shows how a few visionary physicians, life scientists, and computer specialists first created common cause and transformed their respective fields.

The first practitioners of biomedical computing in the United States were sprinkled across disparate institutions, working with radically different machines for largely unrelated applications. November therefore hops from exemplar to exemplar, some more evocative than others. Two of the standout characters are
Robert Ledley, the dentist-physicist-operations researcher who was one of the first proponents of biomedical computing, and Joshua Lederberg, the Nobel laureate genetics pioneer, astrophysiologist, and early video gamer who helped build a biomedical computing empire at Stanford University. Other figures, such as the National Institutes of Health bureaucrats in chapter 2 and the hardworking life scientists of chapter 4, are less colorful—though that may reflect the contrast between Ledley and Lederberg’s grand visions and the quotidian institutional politics and mental slog needed to make such visions a reality.

Biomedical Computing is filled with insights, but its central argument is summarized easily: computing remade biomedicine; biomedicine remade computing. Or, with more nuance: the desire to bring computers into biomedicine required a reconception of what life is and how to understand it; and the special requirements of biomedical researchers spurred innovation in computer design that led, rather directly, to the personal computers and interactive devices we take for granted today. Biology and medicine became more mathematical, and to some extent more reductionist, to accommodate computers, while computer designers became more interested in real-time user interfaces and user-friendly reprogrammability to accommodate the messy experimental conditions associated with the study of living organisms.

Conveying that mutual transformation makes Biomedical Computing a significant, timely contribution to both the history of computing and the history of biomedicine. The former field is quickly accelerating away from its Alan Turing and transistor roots, and November’s book is a great example of where the history of computing could go next. Similarly, historians of the postwar life sciences are quickly moving beyond stories about the gene, and November’s book demonstrates one path that the field could take next. I suspect historians of medicine will have a harder time with Biomedical Computing, largely because November’s narrative is mostly about early failed experiments in things such as “bioengineering” and computerizing patient records—the successful diffusion of computers into medical research and clinical practice mostly took place after his story ends. When historians of medicine do turn to the computerized clinic, however, they will find Biomedical Computing an indispensable forerunner.

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Between 1974 and 2009 Americans voted 146 times on ballot measures repealing nondiscrimination protections for LGBT (lesbian, gay, bisexual, and transgendered) people or forbidding the enactment of such protections by local or state governments; banning LGBT teachers from classrooms or forbidding teachers to discuss homosexuality or gay rights with their students; and disqualifying LGBT couples from marrying, adopting, or even making use of legal instruments to protect shared property. Most of the time such initiatives passed. Another hundred or so attempted measures did not make it onto local or state ballots after failing to garner enough signatures or being disqualified in the courts. Hardly an election went by, however, without voters somewhere in the country casting ballots to decide whether lesbian, gay, bisexual, or transgendered citizens should enjoy the same rights and protections as their non-LGBT neighbors and family members.

In Gay Rights at the Ballot Box, the sociologist Amy L. Stone examines these contests and especially the ways LGBT people rallied to combat antigay initiatives at the state and local levels. The national movement is here as well, of course. Indeed, Stone argues that organizations such as the National Gay and Lesbian Task Force provided not only much-needed financial resources but also training in what was called the Oregon Model, after the 1992 campaign in which LGBT Oregonians convinced their fellow citizens to vote “No on 9.”

Introduced by the Oregon Citizens Alliance (OCA), Ballot Measure 9 would have prohibited the use of tax dollars to “promote...