wide. She also explores the major role that the LMB and its influential leaders played in the British science policy arena, from the immediate postwar expansion of the MRC ambit, through Labour Government's "white heat" innovation policy in the 1960s and the Conservative's Rothschild Report era in the 1970s, to UK participation in the European Molecular Biology Organization and beyond.

With its many perspectives on the rise of molecular biology in Britain, *Designs for Life* will be appreciated by biologists, historians, and those involved with science policy. The book will surely interest anyone intrigued by the way science seems to follow its own internal logic while participating centrally in the society in which it is embedded.

BOOKS: SCIENTIFIC PRACTICE

A Star to Sail Her By

James Austin

Over the last couple of decades, the practice of science has, to put it mildly, become more complicated. In the era following World War II, science in the United States was culturally homogeneous, labs were small, research funds were easy to come by, and scientists had wives at home to watch the kids. In that climate, graduate education focused, appropriately, on science rather than management.

Times have changed, and the skills scientists need to succeed have expanded. Today's labs are culturally diverse and women are well represented. Many young scientists are parents who, through personal desire or financial necessity, are equal partners in raising their children. Funding is harder to come by than it used to be, and the more complex and arcane rules of the funding process are taken seriously by the scientists' home institutions and supporting agencies alike. In short, managing a laboratory is more technical than it used to be. It is also more necessary because there are pressures on principal investigators and their lab workers to spend additional time at work and at home. Running a laboratory is skill- and time-intensive; when the grant proposals are written, the technicians hired, and the discontented postdocs assuaged, there can seem to be little time left for doing actual science—especially when teaching, professional service, and raising families is thrown into the mix. With *At the Helm: A Laboratory Navigator*, Kathy Barker aims to help young scientists raise their scientific productivity by providing them an easily absorbed short course on management in the context of the single-investigator science laboratory.

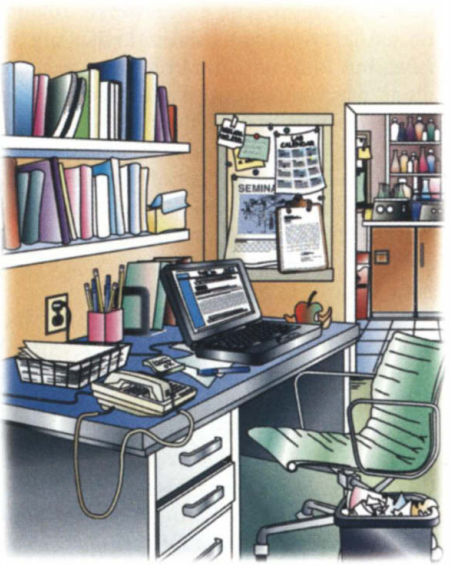
At the Helm
A Laboratory Navigator
by Kathy Barker
Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York, 2002. 362 pp. $45. ISBN 0-87969-583-8.

Unlike most business-management tomes, *At the Helm* presents few overarching theories or unifying principles. Barker prefers instead a common-sense approach to everyday decisions in a wide range of areas. In considering lab leadership, for example, she comments, "The nature of research, and the implicit respect for the intelligence and capabilities of other lab workers, means that barking out orders will not necessarily get you anywhere." She suggests keeping at least two backup copies of important data, one off site in case of disaster. Discussing visas for foreign workers, she notes that the "prevailing wage" requirement means a small lab might have to pay an H-1B visa holder as much as a large biotech company would offer. In various chapters, she provides recommendations for the effective use of unexpected free time, advice on how to fire someone, and hints on maintaining a productive laboratory culture. For a new principal investigator, the sections on determining authorship and hiring personnel are likely to be especially valuable.

In a few places, the book relies too much on the author's own experience (a reflection, no doubt, of her desire to keep things simple). In her discussion of time management, for example, Barker advises that "it is usually best to keep only one to-do list and calendar for both personal and work-related tasks." That is a fine suggestion, but this is clearly a matter of personal taste, and she probably provides more detail here than needed. Such faults, however, are few and easy to forgive (especially because they were obviously committed in the interest of producing a useful book).

At the Helm is a font of practical information, and for that reason ought to be read by young scientists. Indeed, it is the only work available on managing a single-investigator science lab. But what sets the book apart is that Barker implicitly encourages careful consideration of what it means to be a scientist. Rather than presenting, as some advisors do, an overly narrow, self-reflective vision of how a science lab ought to be run, she offers an abundance of diverse observations from recently published sources, as well as unattributed (and often conflicting) quotations from personal interviews, to assist young researchers in charting a personal course through science.

This aspect is perhaps best displayed in the book's final section, "Having It All," which focuses on adapting work styles to changes in personal circumstances, such as getting married or having children. The four quotations that begin the chapter present contrasting views on the compatibility



of science and personal life. Horace Judson reports that "[w]ives, children, houses, regular hours are the bane of committed laboratory research, [James] Watson made clear." In contrast, Max Perutz notes that for 36 years his Cambridge colleague Alan Hodgkin "did most of his experiments with his own hands and yet found time to have a family life; to develop wide interests in literature, painting, and music; to watch birds; and to cultivate lasting friendships with a great variety of fascinating people." The juxtaposition dispels the myth, common among young researchers, that success in science requires abundant inputs (i.e., hours in the lab) instead of, or in addition to, abundant outputs (i.e., publications in high-impact journals). Without discouraging those eager and available to work long hours, Barker's book offers the promise of an alternative—sound management leading to greater productivity—for those who want to have a life outside the lab.

The numerous practical ideas make *At the Helm* a valuable read for many scientists embarking on their careers. But Barker also offers, implicitly, a compelling argument that young researchers have the right—and, indeed, the responsibility—to chart their own course, deciding for themselves how to do good work while seeking rich and meaningful professional and personal lives.

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