fiscal commitments. Singer includes a review of consortial advantages and disadvantages in terms of the reference collection, including a certain lack of local control over selection. In her final chapter, Singer examines the importance of discovery and access for reference collections, while also noting related challenges, especially with regard to electronic resources. Discovery tools are posited as a potential solution to some of the access issues and a possible bridge between print and electronic collections, but Singer argues that these tools are too new to be able to evaluate their utility thoroughly now. In the appendix, Singer offers a very detailed template for a reference collection development policy.

Throughout the book, Singer provides many useful checklists of criteria to consider plus many lists of pros and cons, which help frame topics for the reader. Each chapter includes bibliographic references and suggestions for further reading.

This book provides a good introduction to the many aspects of reference collection management. It is perhaps most useful for academic libraries, but the concepts are applicable to all library reference collections.—Karen Greever (greeverk@ kenyon.edu), Kenyon College, Gambier, Ohio

Open Access. By Peter Suber. Cambridge, MA: MIT Press, 2012. 242 p. \$13 paperback. (ISBN: 978-0–262-51763-8).

The Internet and web have changed the way we consume information, be it for personal or academic use. Over the last decade, publishers of academic journals have been making the migration from print to online distribution. Meanwhile, many academics and others involved in the scholarly publishing industry have seen the potential of the web to widely disseminate information. Currently there are barriers to accessing much of the academic material that is available on the web because it is owned and operated by for-profit, or toll access, publishers. To break down these barriers, academic institutions, libraries, nonprofit organizations, and authors are looking more to the open access (OA) movement, which encourages providing freely available research to anyone with a computer and an Internet connection.

Many librarians and academics have a general idea of what OA means, but have not really delved into the specifics of how it works. In Open Access, Peter Suber explains the ins and outs of the OA movement, in a quick and efficient way, to inform the busy researcher. The first chapter of the book, "What is Open Access?" succinctly explains each type of OA, from the difference between Gold OA (academic articles in an open access journals) and Green OA (academic articles housed individually in institutional repositories or digital collections), to the difference between Gratis OA ("access that is free of charge but not free of copyright and licensing restrictions" (175)) and Libre OA (access that is free of charge and most copyright restrictions). Suber also provides a glossary of commonly used OA terms.

In the first chapter Suber explains "what" OA is, and he dedicates the second chapter to explaining the "why." In this chapter, titled "Motivation," Suber lists the reasons why academic researchers and academic institutions should be interested in publishing in and supporting OA initiatives, including the exponentially increasing costs of commercial journals, gaps in access at even the most well-funded institutions, and usage restrictions placed on journals by publishers.

In the next four chapters of the book, Suber focuses on the "how" of OA. In a chapter titled "Varieties," he describes in more detail the differences between Green and Gold OA, Gratis and Libres OA, and how these different models may be intermingled. He also touches on how journals and institutional repositories achieve Gold or Green status. In a chapter titled "Policies," he explains the emergence of OA mandates by academic institutions and funding agencies, such as the National Institutes of Health. These mandates, pioneered at many of the country's most prestigious universities and research organizations, strongly encourage, or in some cases, require faculty to publish finished works in the organization's repository, thus providing Green OA availability. This chapter also explains why mandates for Gold OA, requiring researchers to publish only in OA journals, would severely restrict the publishing possibilities for researchers because "only 25 percent of peer reviewed journals are OA" (91). The chapter titled "Scope" lays out the different kinds of materials that could be considered for OA publishing. The author points out that although the OA movement has been championed by the scientific community, it does not mean researchers from other disciplines or creators of materials other than research articles should be excluded from publishing their work within the OA framework. This chapter briefly explains how materials outside of academic articles, including theses and dissertations, research data, government data, source code, scholarly monographs, textbooks, creative works, newspapers, images, and other unique materials, would benefit from OA publishing. He touches on the readers, aside from traditional researchers, who will benefit from these materials being openly available, including lay readers and even machines utilizing opening access software.

The last chapter in this section, titled "Copyright," explains concisely how copyright works when an author publishes in an OA journal: "Either the author retains the key rights and the publisher obtains the author's permission, or the author transfers the key rights to the publisher and the publisher uses them to authorized Open Access" (125). The chapter also discusses copyright guidelines of tollaccess journals in comparison with OA journals and how most publishers allow authors to place their works in their local institution's repository, thereby providing Green OA to their articles.

One concern of authors is the fee often required to publish in a Gold OA journal. In a chapter titled "Economics," Suber explains the payment structure for OA journals and allays authors' fears by offering suggested means of securing funding for OA publishing.

In the final two chapters Suber discusses the future of OA and encourages researchers to publish their articles in this manner, whether in an OA journal or institutional repository. Suber believes that the future of OA is bright, but only if we educate ourselves on how it works and rebuke common misunderstandings about it.

Open Access provides a brief but complete overview of OA publishing. The audience for this book is primarily researchers who might someday be publishing their articles in OA journals or institutional repositories, and have questions about OA publishing and how it can work for them. The book can be a helpful guideline for librarians who are generally interested in the OA movement, publishing their works in an OA format, or who are working with faculty on promoting OA at their institution.-Elizabeth Siler (esiler@fiu.edu), Florida International University, Miami, Florida

Sudden Selector's Guide to Biology Resources. By Flora G. Shrode. Chicago: Association for Library Collections & Technical Services, 2012. 85 p. \$28.50 softcover (ISBN: 978-0-8389-8600-4) \$13.50 PDF e-book. ALCTS/ CMS Sudden Selector's Series.

Sudden Selector's Guide to Chemistry Resources. By Elizabeth Brown. Chicago: Association for Library Collections & Technical Services, 2012. 93 p. \$28.50 softcover (ISBN: 978-0-8389-8591-5) \$13.50 PDF e-book. ALCTS/CMS Sudden Selector's Series.

The Sudden Selector's Series provides assistance to librarians who are assigned subjects for collection development with which they are unfamiliar. These two new guides in biology and chemistry are particularly welcome for librarians like me with an undergraduate degree in English. The authors have written these guides for those who possess only a basic understanding of library reference needs and an elementary understanding of the sciences (Brown, xv).

The guides are essentially annotated bibliographies; the authors pair excellent introductions to their topics with selected references for further information and exploration. The guides are clearly written and well organized, although there are variations in their structure. Each begins with an overview of its science, including a description of the organization of literature in the discipline. The guide to chemistry provides an overview of chemists and how they approach information, followed by chapters on collection analysis, current awareness tools, the print literature, chemistry research tools, approval plans, and general advice. The guide to biology includes chapters on election tools, databases, and current awareness sources.

The guides feature both print and digital resources. The authors also include data repositories, additional specialized resources, and literature databases. There are a few dated materials in the guide to chemistry, such as Lehninger's Principles of Biochemistry, the fourth edition, which was cited although a fifth edition was published in 2008. In the guide to biology, some databases are marked "free," some databases are marked "subscription," but others are unmarked, rendering their status unclear (Shrode, 20). This confusion is but a minor problemthe number and types of resources reviewed in the guides, including websites such as the Tree of Life web Project, Google Scholar, and a selection of wikis, are impressive.

As both guides deal with scientific inquiry, they address current research and how to keep up with trends in biological and chemical research. Brown notes that "applications of chemical principles to other scientific disciplines define today's research" (3); Shrode indicates that "a high degree of interdisciplinary crossover is evident in the literature" (2). One current trend addressed by both authors is the increasing availability of open access (OA) journals, though Brown notes that chemistry has been slower to adopt this new publishing model (43). Both authors provide lists of open access resources available in their disciplines and provide suggestions for how to monitor developments in the OA arena.

The assumption in both guides appears to be that the reader will work at a large institution. There are uneven efforts to make the content relevant to other sorts of institutions. For example, Shrode specifies conference proceedings in biology as a genre that public librarians may want to skip (6). Links to recommended sample library guides (Shrode, 9) are all from large institutions; examples from smaller academic and community colleges would have made a nice addition. Brown lists Library of Congress classification ranges for main subdivisions of chemistry (3-5), but does not provide Dewey equivalents until page 71. The annotations provide an avenue for those readers from smaller or specialized libraries to learn which resources are appropriate for them. For example, Shrode points out that the Encyclopedia of Life includes information suitable for the general public (60). Both authors include resources at a variety of levels and organize them into helpful categories; those resources in the broad categories may be useful in many different libraries.

Advice is interspersed throughout