Book Reviews

Drug Discovery Handbook. Edited by Shayne Cox Gad (Gad Consulting Service). Wiley-Interscience, Hoboken. 2005. xx + 1471 pp. 16 × 25 cm. $160.00. ISBN 0-471-21384-5.

It has been said that one should not judge a book by its cover, but, clearly, where else could one start? *Drug Discovery Handbook*, a new compendium on the topic, edited by a pharmacologist, disappoints in this regard. As a biologist with modest experience in drug discovery, this reviewer expected to find history, current topics, protocols, and discussions of the science behind the methods. Rather, there was a disjointed effort, few protocols, detail when not needed, and, in some places, not enough information. Inexplicably, the cover design emphasized viral fusion (perhaps of HIV), a narrow biological phenomenon that barely generalizes to current drug discovery efforts in industry, academic, and government laboratories.

To be fair, one could, alternatively, determine whether the editor reached the goals he set out in the preface. It appears that the editor's intention was to provide food for thought to jumpstart stalled drug discovery efforts. There is no apparent organization to the 29 chapters that start with a history of natural products in medicine, move to systems biology and chemoinformatics, examine high-throughput screening over multiple chapters, and supply a surfeit of information on diseases that range from Alzheimer's to ulcers. Finally, the book closes with chapters on well-studied kinase targets and efforts in cancer chemotherapy. If each chapter is taken individually, some are standouts: Chapter 3 on computer-assisted drug design, Chapter 4 on systems biology, and Chapter 13 on high-throughput screening.

Importantly, most chapters are readable and contain extensive bibliographies; however, this reviewer was frequently asking, "Who is the audience?" For example, the chapter on the theory and practice of crystallography is explained well, but contained mathematical formulas that are not practical for a graduate student intent on learning, nor a scientist who has experience in drug discovery, nor one who is merely interested in the topic. I am left to speculate that a "handbook" such as this might help a managerial/administrator scientist. It might also be a useful addition to the reference shelf in your local scientific library.

In summary, natural products researchers (this journal's audience) who desire an overview of the field of drug discovery may benefit from this book, but there are probably better sources of information to be found if serious discovery efforts are planned.

Susan D. Mertins
National Cancer Institute
Frederick, Maryland 21702

NP0682291

10.1021/np0682291