

development of a successful medical institution. His story puts the individual struggle against cancer into a larger context, celebrating the courage of survivors, medical professionals, and scientists throughout history.

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Molecular Pathology in Drug Discovery and Development. Edited by J. Suso Platero. Hoboken, NJ: Wiley Inc.; 2009. 349 pp. US \$115 Hardcover. ISBN: 978-0470145593.

As the development of drugs continues to advance in the new decade, the development of molecular biomarkers must likewise advance in order to ensure that patients continue to receive the best possible standard of care. In *Molecular Pathology in Drug Discovery and Development*, editor J. Suso Platero argues that future medical care will need to be tailored to individual patients. In order to facilitate this personalized medicine, Platero states that clinicians and researchers ought to work together to produce biomarkers and therapeutic agents simultaneously, thereby streamlining our ability to understand disease pathology, find drug targets, select patients likely to benefit from a drug, and determine the efficacy of new drugs.

The majority of the book focuses on how molecular biomarkers have been utilized in cancer treatment, although the authors do occasionally touch on other diseases such as HIV/AIDS and cystic fibrosis. Arguably, the work might be improved by a more in-depth discussion of the latter diseases, since the overwhelming focus on cancer leads to a certain level of redundancy between the chapters. On the other hand, it must be acknowledged that the authors' depiction of the historical development of cancer biomarkers is well done. One of the central ideas put forth over the course of the book is that clinicians and researchers should always be open to the development of new biomarkers, rather than preselecting a set of biomarkers

for a given drug. The authors discuss how clinical trials may be conducted in order to discover and incorporate novel biomarkers, thereby improving our understanding of both disease pathology and treatment feasibility.

Molecular Pathology in Drug Discovery and Development also contains a plethora of technical information on how biomarkers should be measured and interpreted. The authors discuss the best ways to generate tissue slides and harvest nucleic acids for analysis. Various pathological techniques are discussed, with special emphasis placed on immunohistochemistry (IHC), transcriptional profiling, and automotiv quantitative analysis (AQUA). Detailed explanations of how biomarkers should be analyzed also are provided, and colored inserts offer readers valuable examples of how histological slides and microarray results may appear.

What may be the main criticism of the book is that the authors prefer to discuss instances in which biomarkers already have been proven to be useful rather than hypothesizing on how biomarkers may evolve in the future. Although the authors do give a brief overview of how AQUA may provide better measurement of biomarkers than IHC, the majority of the information discussed is of a technical nature. It seems as though the work might have benefitted from either an extended discussion of recently developed assays or an analysis of how our current use of biomarkers might be improved. Such a discussion would give readers an idea of how they could contribute to the field.

Overall, *Molecular Pathology in Drug Discovery and Development* is a well-written book that provides both an overview of how biomarkers may be developed and detailed explanations of how to measure and analyze said biomarkers. Although the nature of the book's subject matter may make it more useful to clinicians and scientists interested in treating cancer, its in-depth explanations of various assays make it useful to anyone interested in molecular pathology.

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