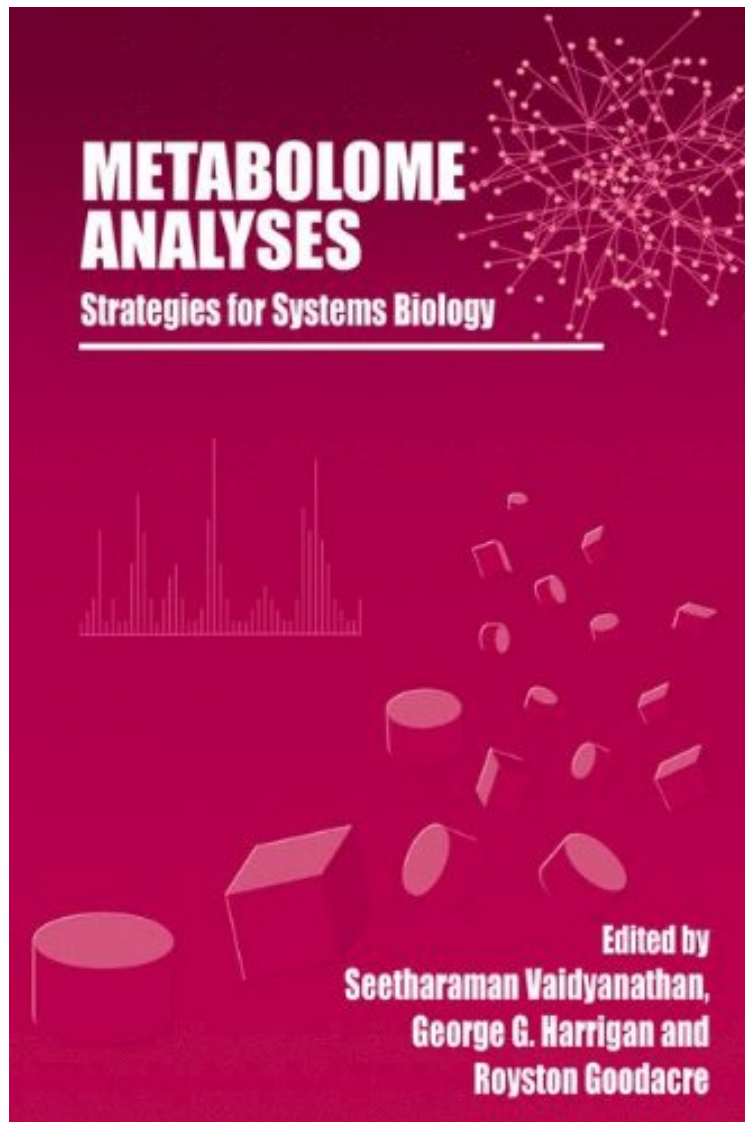


(Library ebook) Metabolome Analyses:: Strategies for Systems Biology

Metabolome Analyses:: Strategies for Systems Biology

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From Springer : Metabolome Analyses:: Strategies for Systems Biology before purchasing it in order to gage whether or not it would be worth my time, and all praised Metabolome Analyses:: Strategies for Systems Biology:

Metabolome analysis is now recognized as a crucial component of functional genomic and systems biology investigations. Innovative approaches to the study of metabolic regulation in microbial, plant and animal systems are increasingly facilitating the emergence of systems approaches in biology. This book highlights analytical and

bioinformatics strategies now available for investigating metabolic networks in microbial, plant and animal systems. The contributing authors are world leaders in this field and they present an unambiguous case for pursuing metabolome analysis as a means to attain a systems level understanding of complex biological systems.

From the Back Cover Metabolome Analyses is intended as a follow-up to *Metabolic Profiling: Its Role in Biomarker Discovery and Gene Function Analysis* (Kluwer, 2003). That text offered guidelines to currently available technology, bioinformatics and databases. Evidence was presented showing metabolic profiling as a valuable addition to genomics and proteomics strategies devoted to drug discovery and development. This book focuses on how metabolic profiling is being more comprehensively integrated with the other "omics" technologies. It provides more practical applications of such "panomics" or "Systems Biology" approaches. The expanding use of mass spectrometry as a measurement technology in metabolic profiling is addressed through demonstrated applications. The integration of metabolic profiling and proteomics is probably most developed for plant-based studies, which was not addressed in Volume 1. Other areas related to metabolic profiling continue to show significant development. These include database strategies and an increased acceptance by the pharmaceutical industry of metabolic profiling. Also covered is the use of *in silico* metabolic networks. Again the focus is primarily on the pharmaceutical industry but the importance of metabolic profiling to studies on human nutrition (a burgeoning area) is discussed. The primary audience for *Metabolome Analyses* consists of academics (professors, post-doctoral researchers) involved in metabolic analyses, genomics transcriptomics, proteomics, bioinformatics; and corresponding researchers in the pharmaceutical and biotechnology industries (including Big Pharma, mid capital and small venture-capital based enterprises) and in research institutes.