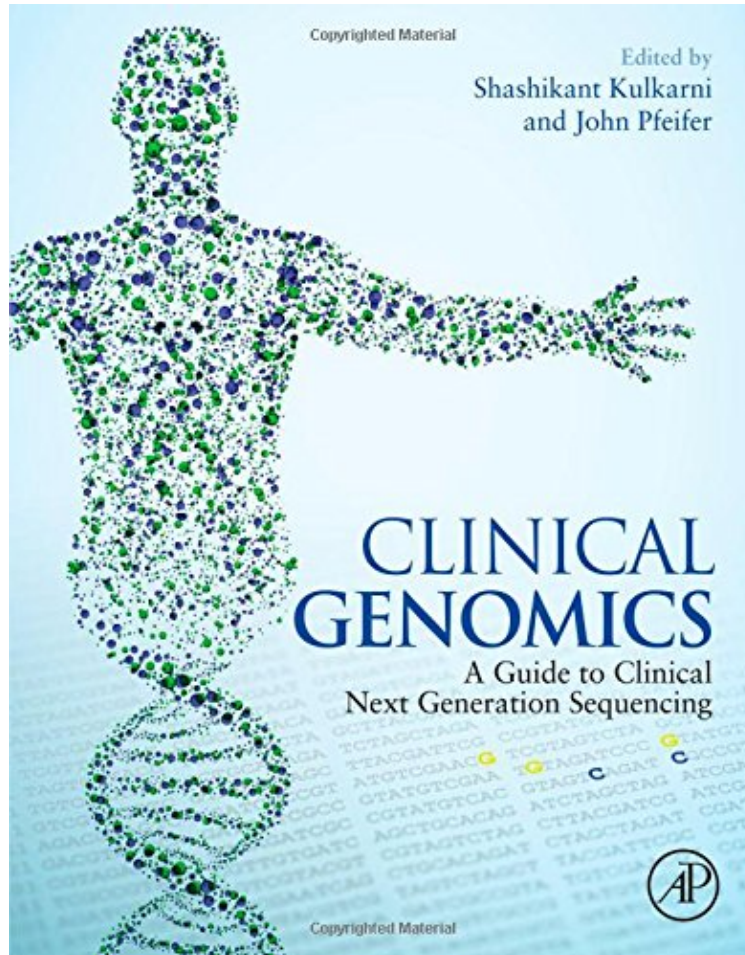


## Clinical Genomics

*From Academic Press*

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**From Academic Press : Clinical Genomics** before purchasing it in order to gauge whether or not it would be worth my time, and all praised Clinical Genomics:

2 of 2 people found the following review helpful. Outstanding introduction to clinical next-generation sequencing  
By Jonathan Dudley  
This book comes from a department that has had a leading role in the clinical implementation of next-generation sequencing (NGS) and provides a great overview of the subject matter. The contributors focus on the technology and informatics surrounding NGS, including sequencing chemistries; target enrichment methods; bioinformatic approaches to calling SNVs, indels, CNVs, and translocations; advantages and disadvantages of targeted, exome, and whole genome sequencing approaches; and regulatory issues surrounding the clinical use of NGS. It also provides a brief overview of technologies not yet widely used in the clinic, including RNA-seq and long-read sequencing. A future edition might benefit from chapters on liquid biopsies and the use of genomic information to guide immunotherapy. I'd recommend this book to anyone interested in better understanding next-generation sequencing, including life-sciences PhD students, laboratory-based clinicians, and entrepreneurs working in molecular

diagnostics. It is very clearly and logically written, and you'll walk away with a deeper grasp of the concepts underlying clinical genomics. I read this book shortly after reading *Genomic Applications in Pathology*, which focuses more on the findings and applications of genomics to specific cancers, inherited disorders, and infectious disease processes. The two books were released around the same time, are very well referenced, complement each other nicely. In sum, *Clinical Genomics* provides a fantastic overview of the subject matter, and I highly recommend it. 2 of 2 people found the following review helpful. *Clinical Genomics* offers a very comprehensive review of the utilization of Next Generation Sequencing for advanced molecular profiling of cancer and other disease. While NGS is revolutionizing how precision medicine is and will be delivered to improve human health, there are multiple levels of complexity that must be contemplated and addressed in order for NGS to be deployed effectively and responsibly. *Clinical Genomics* should be considered required reading for any individual or laboratory interested in the clinical implementation of NGS. 1 of 1 people found the following review helpful. It is a great introduction to *Clinical Genomics* By Eric J. Winter. It is a great introduction to *Clinical Genomics*. Reviews the key concepts needed to understand the science and bioinformatics behind genomic analysis with special attention to how it should be handled in a clinical environment. It does NOT go into many specifics about particular variations or diseases which may be what some people are looking for.

*Clinical Genomics* provides an overview of the various next-generation sequencing (NGS) technologies that are currently used in clinical diagnostic laboratories. It presents key bioinformatic challenges and the solutions that must be addressed by clinical genomicists and genomic pathologists, such as specific pipelines for identification of the full range of variants that are clinically important. This book is also focused on the challenges of diagnostic interpretation of NGS results in a clinical setting. Its final sections are devoted to the emerging regulatory issues that will govern clinical use of NGS, and reimbursement paradigms that will affect the way in which laboratory professionals get paid for the testing. Simplifies complexities of NGS technologies for rapid education of clinical genomicists and genomic pathologists towards genomic medicine paradigm. Tried and tested practice-based analysis for precision diagnosis and treatment plans. Specific pipelines and meta-analysis for full range of clinically important variants.

"...presents key bioinformatic challenges and the solutions that must be addressed by clinical genomicists and genomic pathologists, such as specific pipelines for identification of the full range of variants that are clinically important." -- Anticancer Research, February 2015  
About the Author: Dr. Shashikant Kulkarni is the Head of Clinical Genomics, Genomics and Pathology Services and also the Director of Cytogenomics and Molecular Pathology at Washington University School of Medicine. In addition, he is Associate Professor of Pathology and Immunology, Pediatrics, and Genetics. His lab's principle research interest is delineation of novel genomic structural and single nucleotide variants in cancer.