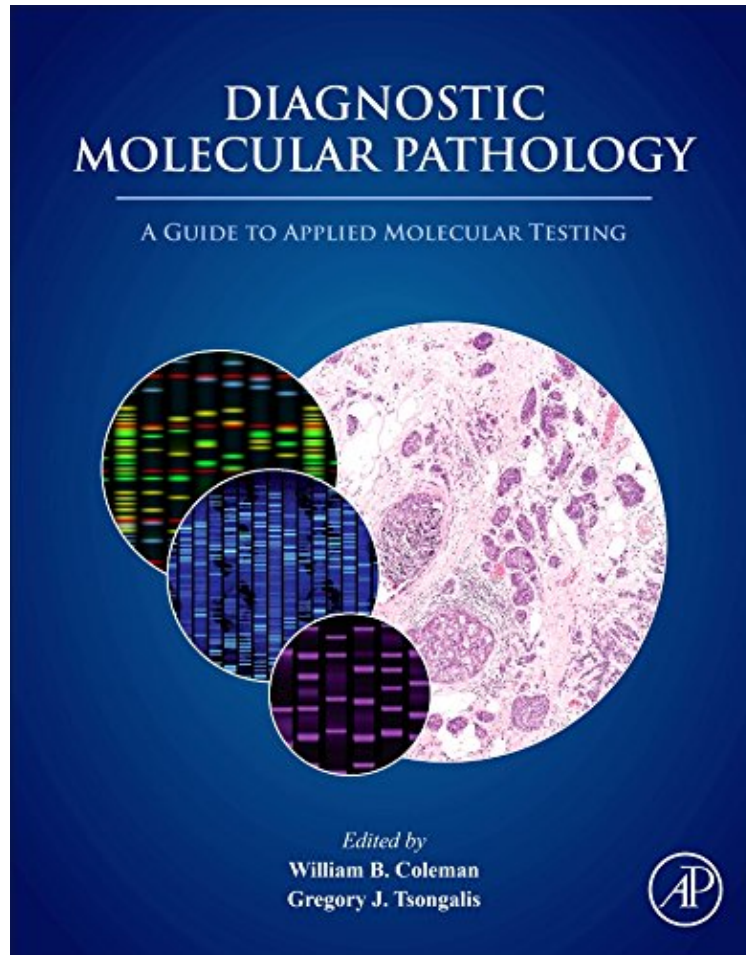


(Free) Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing

Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing

From ACADEMIC PRESS

*Download PDF | ePub | DOC | audiobook | ebooks



 Download

 Read Online

#1190944 in Books ACADEMIC PRESS 2016-11-04Original language:EnglishPDF # 1 10.90 x 1.40 x 8.70l, .0 #File Name: 0128008865582 pagesACADEMIC PRESS | File size: 68.Mb

From ACADEMIC PRESS : Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing before purchasing it in order to gage whether or not it would be worth my time, and all praised Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing:

Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing is organized around disease types (genetic disease, infectious disease, neoplastic disease, among others). In each section, the authors provide background on disease mechanisms and describe how laboratory testing is built on knowledge of these mechanisms. Sections are dedicated to general methodologies employed in testing (to convey the concepts reflected in the methods), and specific description of how these methods can be applied and are applied to specific diseases are described. The book does not

present molecular methods in isolation, but considers how other evidence (symptoms, radiology or other imaging, or other clinical tests) is used to guide the selection of molecular tests or how these other data are used in conjunction with molecular tests to make diagnoses (or otherwise contribute to clinical workup). In addition, final chapters look to the future (new technologies, new approaches) of applied molecular pathology and how discovery-based research will yield new and useful biomarkers and tests. Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing contains exercises to test readers on their understanding of how molecular diagnostic tests are utilized and the value of the information that can be obtained in the context of the patient workup. Readers are directed to an ancillary website that contains supplementary materials in the form of exercises where decision trees can be employed to simulate actual clinical decisions. Focuses on the menu of molecular diagnostic tests available in modern molecular pathology or clinical laboratories that can be applied to disease detection, diagnosis, and classification in the clinical workup of a patient. Explains how molecular tests are utilized to guide the treatment of patients in personalized medicine (guided therapies) and for prognostication of disease. Features an ancillary website with self-testing exercises where decision trees can be employed to simulate actual clinical decisions. Highlights new technologies and approaches of applied molecular pathology and how discovery-based research will yield new and useful biomarkers and tests.

"Diagnostic Molecular Pathology is destined to become an important cornerstone and go-to volume for pathologists, researchers, and clinicians indeed anyone who wants to understand the approach and application of modern molecular techniques in disease detection and diagnosis. Drs. Coleman and Tsongalis and their impressive stable of contributors are to be congratulated for making the exciting and rapidly expanding science of molecular diagnosis accessible to the novice, while also providing the expert with important details on the nuances. Beyond just a compendium of useful information, it is a well-curated journey through basic concepts, infectious diseases, malignancy, hematopathology, and genetic diseases and even includes access to a website with lab test videos and decision-making exercises." --Richard N. Mitchell, MD, PhD (Brigham and Women's Hospital and Harvard Medical School) "With much fanfare, molecular techniques have revolutionized clinical medicine, from diagnosis to personalized medical therapeutics. It is with this background that Diagnostic Molecular Pathology approaches the daunting task of summarizing the advances in the field from infectious disease, heritable and acquired genetic diseases, hematological malignancies, to pharmacogenomics. In a comprehensive publication, the editors perform a yeoman's effort in covering this dynamic and exciting field." --Lawrence M. Silverman, PhD (University of Virginia School of Medicine) "Diagnostic Molecular Pathology provides a panoramic view of diagnostic molecular pathology testing, written by leaders in the field. It is a great reference and learning tool." --Dani S. Zander, MD (University of Cincinnati Medical Center) About the Author William B. Coleman, PhD is Professor of Pathology and Laboratory Medicine at the University of North Carolina School of Medicine (Chapel Hill, NC), and Director of the UNC Program in Translational Medicine. In addition, he is affiliated with the Curriculum in Toxicology, the Cancer Biology Training Program, and is a member of the UNC Lineberger Comprehensive Cancer Center. Dr. Coleman is actively involved in teaching biomedical graduate students and is a four-time recipient of the Joe W. Grisham Award for Excellence in Graduate Student Teaching from the Molecular and Cellular Pathology graduate students at UNC-Chapel Hill. Dr. Coleman is active in the leadership of the American Society for Investigative Pathology, and is a member of the American Association for Cancer Research. He serves as an associate editor for The American Journal of Pathology, BMC Cancer, and PLoS One, and serves on the editorial boards of Clinica Chimica Acta, Experimental and Molecular Pathology, Archives of Pathology and Laboratory Medicine, Laboratory Investigation, and Current Pathobiology Reports, and has served as an ad hoc reviewer for 95 other journals. Dr. Coleman's major research interests are in the molecular pathogenesis of human cancers, with a specific interest in breast cancer epigenetics, liver carcinogenesis, and lung cancer biology. His research has been funded by the NIH/NCI, The Susan G. Komen Breast Cancer Foundation, Friends for an Earlier Breast Cancer Test, and the UNC Lineberger Comprehensive Cancer Center. Dr. Coleman is the author of over 125 original research articles, reviews, and book chapters. In addition, Dr. Coleman has co-edited or co-authored eight books on topics related to molecular pathology, molecular diagnostics, and the molecular pathogenesis of human cancer. Affiliations and Expertise Professor, Department of Pathology and Laboratory Medicine, Curriculum in Toxicology, UNC Program in Translational Medicine, UNC Lineberger Comprehensive Cancer Center, University of North Carolina School of Medicine, Chapel Hill, NC, USA Greg Tsongalis is the Director of the Laboratory for Clinical Genomics and Advanced Technology (CGAT) at the Dartmouth-Hitchcock Medical Center and Norris Cotton Cancer Center (NCCC) in Lebanon, NH and a Professor of Pathology and Laboratory Medicine at the Audrey and Theodor Geisel School of Medicine at Dartmouth in Hanover, NH. He is a member of the NCCC Molecular Therapeutics Program and the gastrointestinal and breast cancer clinical oncology groups. In 2016 he became a member of Dartmouth College's Program in Experimental and Molecular Medicine (PEMM), and he has served on the advisory board of the Health Care Genetics Professional Science Masters Degree Program at the University of Connecticut (Storrs, CT). His area of expertise is in the development and implementation of clinical molecular diagnostic technologies. His research interests are in the pathogenesis of human cancers, personalized medicine and disruptive technologies. He has authored/edited twelve textbooks in the field of

molecular pathology, published more than 200 peer reviewed manuscripts, and has been an invited speaker at both national and international meetings. He has served on numerous committees of the AACC, ASIP, FASEB and AMP where he is a past President. He is active in the Alliance for Clinical Trials in Oncology, the Association for Molecular Pathology, the American Association for Clinical Chemistry, the American Association of Bioanalysts, and the American Society for Investigative Pathology. He serves on the editorial boards of 8 journals including Clinical Chemistry, Experimental and Molecular Pathology, and the Journal of Molecular Diagnostics. He also serves on numerous corporate scientific advisory boards.