

1. Record Nr.	UNINA9910300327503321
Autore	Hosler Gregory A
Titolo	Molecular Diagnostics for Dermatology : Practical Applications of Molecular Testing for the Diagnosis and Management of the Dermatology Patient / / by Gregory A. Hosler, Kathleen M. Murphy
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-54066-X
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (370 p.)
Disciplina	610 610724 616.07 616.5
Soggetti	Dermatology Pathology Diagnosis, Laboratory Laboratory Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Terms and Definitions -- Basics of Molecular Biology and Nucleic Acids -- Principles of the Molecular Basis for Disease -- Molecular Testing Methods -- PCR and PCR-based Assays -- In situ Hybridization -- FISH and Cytogenetics -- Comparative Genomic Hybridization -- Microarray Analysis -- Melanoma -- Cutaneous Lymphoma and Leukemia Cutis -- Soft Tissue tumors -- Genodermatoses -- Infectious Disease -- Viral -- Bacterial and Mycobacterial -- Fungi and Parasites -- Emerging Molecular Applications in Dermatology -- Pharmacogenetics/Pharmacogenomics -- Theranostics.
Sommario/riassunto	This textbook presents the current (and near-future) state of affairs of molecular testing as it pertains to the dermatology patient. It focuses on practical applications of molecular diagnostics over a cross-section of dermatologic disease, including melanoma, lymphoma, soft tissue tumors, genodermatoses, and infectious disease. It includes practical

advice to those ordering molecular tests as well as to those considering performing such tests, providing a potential template for a comprehensive dermatologic molecular diagnostics test menu. Pitfalls of interpretation and algorithmic approaches to testing are included. The textbook is directed towards all readers – clinicians, pathologists, laboratorians, and other inquisitive minds – independent of their level of molecular expertise, to provoke thought or perhaps even change practice. The context for the book is the rapid evolution of the field of molecular diagnostics, which is becoming more pervasive in all disciplines of medicine, including dermatology. This is indeed an exciting time in dermatology. Molecular testing is now incorporated into all aspects of patient management, including diagnostics (identifying and classifying disease), prognostics (predicting disease course), and theranostics (predicting response to therapy). For example, molecular tests are now used to detect germline mutations that result in genodermatoses, somatic genetic events that characterize tumors such as melanoma and sarcomas, and genetic material of otherwise undetectable infectious organisms. For melanoma and lymphoma, testing can potentially predict tumor behavior and modify patient staging. Regarding theranostics, molecular tests that identify specific mutations in proto-oncogenes, such as BRAF and others, are now used to predict which patients will respond to designer targeted therapies. Molecular theranostics has revolutionized the entire treatment paradigm for patients with advanced melanoma, replacing “excise and pray” approaches with personalized medicine.
