

1. Record Nr.	UNINA9910787805003321
Titolo	Cardiovascular genetics and genomics in clinical practice // editors, Sanjiv J. Shah, Donna K. Arnett
Pubbl/distr/stampa	New York : , : demosMEDICAL, , 2015 ©2015
ISBN	1-61705-178-0
Descrizione fisica	1 online resource (326 p.)
Disciplina	616.1/2042
Soggetti	Heart - Diseases - Genetic aspects
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 at the end of each chapters and index.
Nota di contenuto	Cover; Title; Copyright; Contents; Contributors; Preface; References; Video Captions; Share Cardiovascular Genetics and Genomics in Clinical Practice; Part I: Genetics and Genomics: The Basics; Chapter 1: Mendelian Genetics; Take Home Points; Mendel's Laws; Modes of Inheritance; Methods Used to Determine Modes of Inheritance; Clinical Utility of Genetic Information; Glossary; References; Chapter 2: Genetics of Complex Traits; Take Home Points; Quantitative Traits; Familial Aggregation; Measuring Familial Aggregation; Concordance Versus Discordance; Allele Sharing; Twin Studies Concordance of MZ Versus DZ TwinsTwins Reared Apart; Limitations of Twin Studies; Heritability; Conclusions; References; Chapter 3: Genome-Wide Association Studies; Take Home Points; Why do we Need GWAS?; Genetic Basis of GWAS; Simple GWAS; Beyond GWAS Basics: Challenges and Limitations; Limitations of GWAS; Using GWAS Results; GWAS Success in Cardiovascular Disease; Summary; Glossary; References; Chapter 4: Bioinformatics; Take Home Points; Following Up on Linkage Analyses; Following Up on Genome-Wide Association Studies; Obtaining Information on Candidate Genes Characterizing DNA Variants Found within GenesReferences; Chapter 5: Epigenetics; Take Home Points; DNA Methylation; Histone Modifications; Challenges and Opportunities for Human CVD Epigenetic Studies; References; Chapter 6: MicroRNAs; Take Home Points;

MicroRNA Structure and Function; MicroRNA and Cardiac Function; MicroRNA as Biomarkers; MicroRNA Therapeutics; Conclusions; References; Chapter 7: Gene Expression; Take Home Points; Microarray Technology; Quality Control; Data Normalization; Data Analysis; Ontology and Pathway Analysis; Validation and Meta-Analysis; Conclusions; References
Chapter 8: Whole-Exome and Whole-Genome Sequencing Take Home Points; Overview of Exome Chip, WES, and WGS Technologies; Available Strategies for the Conduct of WES Studies; Application of WES to Cardiovascular Disease; Next-Generation Sequencing Technologies for Clinical Diagnostics; Future Directions; Conclusions; References; Chapter 9: Gene-Environment Interactions; Take Home Points; Defining Interactions; Investigating Interactions: Study Design; Investigating Interactions: Statistical Power; Gene-Environment Interactions in Cardiovascular Disease
The Promise and Challenges of Gene-Environment Interaction Research Summary; References; Chapter 10: Genetic Counseling; Take Home Points; Definition of Genetic Counseling; The Power of the Pedigree and Family Health History; Risk Assessment Beyond Basic Mendelian Principle; Psychosocial Counseling; Genetic Counselors in Cardiovascular Practice; Cardiovascular Genetic Testing; Partners in Practice; Conclusions; References; Part II: Genetics of Cardiovascular Disorders/Traits; Chapter 11: Blood Pressure Genomics; Take Home Points
Case Study: Severe Monogenic Hypertension-An Application of Whole-Exome Sequencing

Sommario/riassunto

Cardiovascular Genetics and Genomics in Clinical Practice presents clinical cases to illuminate basic concepts of cardiovascular genetics and genomics as practitioners encounter them in day-to-day practice. The unique use of real-world case discussions facilitates the memorization and understanding of basic principles, which can be more readily applied to actual cases. Cardiovascular Genetics and Genomics in Clinical Practice features a step-by-step learning process that begins with an easy-to-understand "primer" of basic scientific concepts regarding cardiovascular genetics and genomics fol
