

1. Record Nr.	UNINA9910298276703321
Titolo	Genome Mapping and Genomics in Human and Non-Human Primates / / edited by Ravindranath Duggirala, Laura Almasy, Sarah Williams-Blangero, Solomon F.D. Paul, Chittaranjan Kole
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-46306-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (305 p.)
Collana	Genome Mapping and Genomics in Animals, , 2512-3394 ; ; 5
Disciplina	570
Soggetti	Animal genetics Gene expression Evolutionary biology Animal Genetics and Genomics Gene Expression Evolutionary Biology
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	The Utility of Genomics for Studying Primate Biology -- The Human Genome Project: Where Are We Now and Where Are We Going? -- Linkage Mapping: Localizing the Genes that Shape Human Variation -- Association Studies to Map Genes for Disease-Related Traits in Humans -- Gene Expression Studies and Complex Diseases -- Copy Number Variations and Chronic Diseases -- Applications of Genomic Methods to Studies of Wild Primate Populations -- Comparative Genomics: Tools for Study of Complex Diseases -- Genetic Structure and Its Implications for Genetic Epidemiology: Aleutian Island Populations -- Mapping Genes in Isolated Populations: Lessons from the Old Order Amish -- Genetics of Cardiovascular Disease in Minority Populations -- Mapping of Susceptibility Genes for Obesity, Type 2 Diabetes, and the Metabolic Syndrome in Human Populations -- Genetic Influence on the Human Brain -- Variation, Genetics, and Evolution of the Primate Craniofacial Complex -- Genetic Influences on Behavior in Nonhuman Primates -- Genomic Studies of Human Populations: Re-sequencing Approaches to

Sommario/riassunto

This book provides an introduction to the latest gene mapping techniques and their applications in biomedical research and evolutionary biology. It especially highlights the advances made in large-scale genomic sequencing. Results of studies that illustrate how the new approaches have improved our understanding of the genetic basis of complex phenotypes including multifactorial diseases (e.g., cardiovascular disease, type 2 diabetes, and obesity), anatomic characteristics (e.g., the craniofacial complex), and neurological and behavioral phenotypes (e.g., human brain structure and nonhuman primate behavior) are presented. Topics covered include linkage and association methods, gene expression, copy number variation, next-generation sequencing, comparative genomics, population structure, and a discussion of the Human Genome Project. Further included are discussions of the use of statistical genetic and genetic epidemiologic techniques to decipher the genetic architecture of normal and disease-related complex phenotypes using data from both humans and non-human primates.

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