

accumulated long-term audiological investigation of several syndromes is insufficiently described, and therefore not available. It should be acknowledged that space is allocated to mention the value of Mendelian cytogenetics as a tool to identify new genes by identifying the disruption of genes located in the breakpoints of balanced inherited translocations, cosegregating with a specific clinical condition.

In general, the degree of update in terms of proven genetic heterogeneity and functional studies of identified gene products varies between the different chapters, reflecting the different backgrounds of the specific authors. Only some chapters consistently use MIM (Mendelian Inheritance in Man) numbers, which are very helpful for a smooth

comparison between different types of electronic and printed sources.

The appearance of an appendix at the end of each chapter listing other conditions with similar clinical affection but described in another chapter helps in leading the readers to relevant places, when searching for a diagnosis, based on clinical findings.

Many chapters contain surprisingly few references to web-based sources, which would have been much appreciated. A chapter or section on its own could even be considered.

In an increasing number of hearing impairment syndromes, there are now data on temporal bone histopathology and the outcome of treatment by cochlear implant, which would have been worthwhile to quote, since the book has a clinical approach.

In general, Hereditary Hearing Loss and its Syndromes is still a Bible for all those professionals dealing with hearing impairment, and this new, revised edition is warmly recommended. The pace and amount at which the scientific data is accumulating almost makes this task unsurmountable, and definitely calls for some electronic solution in the future. Despite minor editorial discrepancies between different chapters, the book is still a 'must' on the bookshelf for both clinically and scientifically oriented professionals in this field ■

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Genetic epidemiology

Human genome epidemiology

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Discoveries occurring in the field of human genetics are expected to play a central role in medicine and public health by providing genetic information for disease prediction and prevention. The translation of genetic advances into actions to improve health and prevent diseases is depending on scientific information from multiples disciplines. Epidemiology plays a central role in this effort.

In this book, the authors aim to show how the epidemiologic approach will play an important role in the continuum from gene discovery to the development and applications of genetic test.

The authors call this continuum human genome epidemiology (HuGE) to denote an evolving field of inquiry that uses systematic applications of epidemiologic methods to assess the impact of human genetic variation on health and disease.

HuGE is a unique text in which the leaders from a diverse group of disciplines have joined their efforts to create the first comprehensive text on HuGE. This 549-page text is divided into four sections, which are further subdivided into 29 chapters.

Part I describes genomic technologies and their applications, and summarizes

the ethical, legal, and social issues for conducting epidemiologic studies of the human genome. Part II addresses epidemiologic approaches to the studies of genotypes in populations and their relation to diseases. Part III deals with the application of epidemiologic methods to assess genetic information for clinical and public health applications. Part IV uses case studies to illustrate concepts discussed in the first three sections in relation to specific disease examples including gene-environment interactions (pesticides and oral contraceptive use), chronic diseases (colon cancer, Alzheimer disease, cardiovascular disease, breast cancer, and hemochromatosis), occupational exposures, newborn screening issues (fragile X syndrome and hearing loss), and infectious disease (HIV-1 infection).

HuGE is an invaluable resource for a wide audience including epidemiologists, clinical geneticists, molecular geneticists, cytogeneticists, statistical geneticists, population geneticists, services geneticists, medical students, residents, and basic and clinical scientists ■

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