Psychiatric Genetics


As more patients seek information about family risks of psychiatric illness -- an interest likely to increase as gene-identification studies are published -- psychiatrists agree it is their role to discuss these issues but admit they are ill-prepared to do so. Psychiatric Genetics addresses that need as the first book to focus on clinical applications of genetics in psychiatry. It covers issues involved in genetic counseling, the interpretation of familial and genetic information for clinical use, information regarding risks associated with specific psychiatric disorders, risk/benefit considerations related to medication use during pregnancy, and the ethical and social implications of psychiatric genetic knowledge. The goal of this book is to increase the knowledge of mental health professionals about psychiatric genetics. Includes chapters on the role of genetics in drug abuse, neuropsychiatric manifestations of other genetic disorders, and the ethical, legal, and social implications of psychiatric genetic counseling. Twin studies are discussed in detail, discussing why they are important and the advantages of cross-disciplinary studies. The book also provides an overview of the history of psychiatric genetics and an update on the latest research findings. Genetic Approaches to Mental Disorders provides the latest information on the relationship between genetics and mental disorders. For neuroscientists, geneticists, biological psychiatrists and all those with an interest in psychiatric genetics, this volume is addressed to practitioners: a clinically relevant resource that can help them understand the often bewildering flood of information about genetics -- information difficult to interpret, let alone integrate into practice -- and enable them to respond to patients' requests to predict the risk of recurrence of psychiatric illness or provide information about reproductive and pregnancy-related issues. Experts from psychiatry, genetic epidemiology, molecular genetics, genetic counseling, cognitive psychology, and ethics focus on issues that have received little attention elsewhere yet are of increasing importance to clinicians. Written at a level that assumes no particular expertise in genetics, the book features these immediately applicable benefits: It offers a framework for understanding and critically evaluating the psychiatric genetic research literature, enabling clinicians to better understand the meaning and limitations of genetic discoveries when patients raise questions about the relevance of findings to their own risk, and provides a resource for patients who want to seek information about their risk. The book includes an overview of the clinical application of genetic counseling, outlining a typical counseling session while demonstrating how risks are estimated and discussed. It summarizes genetic aspects of major psychiatric conditions -- from childhood-onset disorders through psychotic, mood, and anxiety disorders to dementia -- as well as neuropsychiatric manifestations of other genetic disorders. It alerts clinicians to risk/benefit considerations related to medication use during pregnancy. It covers the ethical, legal, and social implications of genetic counseling and research, illustrating the dilemmas that arise with new advances in psychiatric genetics as a clinical genetic intervention, the application of contemporary genetic knowledge in everyday practice. Psychiatrists, mental health clinicians, and genetic counselors will find it an essential resource for all patient encounters in which genetic issues arise. The book is aimed at psychiatrists, clinical psychologists and trainees in those disciplines, primary care physicians. A history of the first 75 years of the New York State Psychiatric Institute, the first multidisciplinary institute with a psychiatric mission that brought the Institute into being and struggled for its survival and growth. Starting out by tracing the brief history of psychiatric epidemiology, this text describes the study of risk factors as causes of mental disorders. Subsequent sections discuss approaches to investigation of biologic, genetic or social causes and the statistical analysis of study results. Psychiatric Genetics is a concise reference that presents the complexities of this dynamic field in a clearly written, easy-to-access format, with numerous tables and illustrations. Ten expert contributors offer a fascinating view of psychiatric genetics in a text that is thorough but accessible and concise. It also captures the broad scope of the field and its underlying paradigms -- that help us understand the role of genetic factors in the etiology of psychiatric disorders: basic genetic epidemiology, which demonstrates heritability; advanced genetic epidemiology, which explores the nature and mode of action of these genetic risk factors; gene finding, which enables us to infer the probability that a locus in the genomic region under investigation contributes to psychiatric disorder liability; and molecular genetics, which traces the biological mechanisms by which the DNA variant identified using gene finding methods contributes to the disorder itself. Psychiatric Genetics illustrates the importance of Appreciating the complex field of psychiatric genetics -- Presents the major conceptual and statistical issues in psychiatric genetics, including many of the basic principles of both genetic epidemiology and gene finding, as well as a brief review of DNA itself. Detailing the results for one disorder where substantial progress has been made using molecular genetics -- Psychiatric genetics is an exciting new discipline that explores how our minds and behavior are influenced by our genes. Increased interest in this area of medical genetics has been sparked by advances in molecular genetic techniques, the Genome project, the neurosciences, the role of genes in somatic diseases, and the linking of specific genes with complex mental disorders. This Handbook is the definitive resource on this complex, and sometimes controversial, new field.Hardbound. Over the past few years, there has been much research into, and subsequent advances in our understanding of, the genetic causes of psychiatric illness. Most neuropsychiatric diseases have a multifactorial background -- both genetic and environmental factors are important for the development of the disease. The advantages of understanding the inherited component of a psychiatric disease are obviously great, and will eventually lead to more effective treatments. The chapters in this volume are specifically concerned with the latest advances in finding biological and genetic markers for psychiatric disorders. This handbook is a comprehensive guide to this exciting new field. It provides a summary of the current state of knowledge of the biology and genetics of psychiatric disorders, and is intended for all who work in the field. Written for neuroscientists, geneticists, clinical geneticists and all other professionals who study psychiatric genetics, this book provides an overview of the key concepts, and discusses the major findings in the field. The book is a valuable resource for all who work in the field, and will be an essential reference for all those interested in psychiatric genetics.
which to view the genetic and environmental determinants of complex human behavioral traits. Many scientists believe that twins can only be used to estimate "heritability" and that they reveal nothing about how genes influence behavior. In addition, they argue that modern molecular genetics will quickly make twin research obsolete. These widely held views are largely incorrect. Twins are a unique and very powerful tool for exploring a wide variety of hypotheses about both the distal (mostly genetic) and proximal (mostly environmental) origins of human individual differences. Scientific knowledge accumulates most rapidly when scientists ask the right questions and utilize the right tools—the right tools for the job. This book attempts to highlight the questions that might be most productively addressed through the use of twin designs. Every tool, however, has its limitations. This book carefully examines the limitations and assumptions associated with the application of the method to each of the domains discussed. Goal of this Dahlem Workshop: to evaluate the environmental and genetic mechanisms underlying the structure and development of behavior in twins studies: the achievements, limitations, and potentials.Psychiatrists and other mental health professionals are increasingly confronted with questions about the genetics of psychiatric illness, and the clinical applications of new genetic findings. Psychiatric Genetics: A Primer for Clinical and Basic Scientists addresses these questions through a straightforward introduction to the essentials of psychiatric genetics, complementing more comprehensive textbooks that may seem overwhelming for those new to the field. Written and edited by leaders in the field and the International Society of Psychiatric Genetics (ISPG), the book covers basic epidemiology, recruitment for human studies, phenotyping strategies, formal genetic and molecular genetic studies, statistical genetics, bioinformatics and genomics, pharmacogenetics, the most relevant animal models, and biobanking. Each chapter begins with a list of "take home" points that summarizes content, followed by a brief overview of current knowledge and suggestions for further reading. This Primer is ideal for medical students, psychiatric residents, psychiatrists, and basic neuroscience researchers who are interested in learning about the key concepts and recent advances in the exciting field of psychiatric genetics. Vererbung / Krankheit: Psychiatric genetics has become "Big Biology". This may come as a surprising development to those familiar with its controversial history. From eugenic origins and contentious twin studies to a global network of laboratories employing high-throughput genetic and genomic technologies, biological research on psychiatric disorders has become an international, multidisciplinary assemblage of massive data resources. How did psychiatric genetics achieve this scale? How is it socially and epistemically organized? And how do scientists experience this politics of scale? Psychiatric Genetics: From Hereditary Madness to Big Biology develops a sociological approach of exploring the origins of psychiatric genetics by tracing several distinct styles of scientific reasoning that coalesced at the beginning of the twentieth century. These styles of reasoning reveal, among other things, a range of practices that maintain an extraordinary stability in the face of radical criticism, internal tensions and scientific disappointments. The book draws on a variety of methods and materials to explore these claims. Combining genealogical analysis of historical literature, rhetorical analysis of scientific review articles, interviews with scientists, ethnographic observations of laboratory practices and international conferences, this book offers a comprehensive and detailed exploration of both local and global changes in the field of psychiatric genetics. Genetics promises to provide one of the most powerful approaches to understanding the functional pathology of the human brain. This book starts with a brief introduction to the relevant molecular and cellular biology and then moves on to cover the evidence for a genetic contribution to normal and abnormal development and to abnormal behaviour in adult life. The final section covers counselling, ethics and takes a look to the future. This volume of the Handbook introduces the basic science of child and adolescent psychiatry and presents a myriad of treatment options available to psychiatrists. These include clinical treatments, such as diet and drug therapy, hypnotherapy and biofeedback; residential or day treatment options; group and family therapy; aggressive interventions such as therapeutic foster placement or adoption; creative treatments, such as art and music therapy; and rehabilitative therapy, including vocational therapy, educational therapy and therapeutic camping. Disorders of behavior represent some of the most common and disabling diseases affecting humankind; however, despite their worldwide distribution, genetic influences on these illnesses are often overlooked by families and mental health professionals. Psychiatric genetics is a rapidly advancing field, elucidating the varied roles of specific genes and their interactions in brain development and dysregulation. Principles of Psychiatric Genetics includes 22 disorder-based chapters covering, amongst other conditions, schizophrenia, mood disorders, anxiety disorders, Alzheimer's disease, learning and developmental disorders, eating disorders and personality disorders. Supporting chapters focus on issues of genetic epidemiology, molecular and statistical methods, pharmacogenetics, epigenetics, gene expression studies, online genetic databases and ethical issues. Written by an international team of contributors, and fully updated with the latest results from genome-wide association studies, this comprehensive text is an indispensable reference for psychiatrists, neurologists, psychologists and anyone involved in psychiatric genetic studies. This book provides an overview of human and animal behavioral genetics and examines the crossroads where the fields of psychology, psychiatry, and genetics intersect. A clinically oriented, comprehensive textbook of psychiatry, for use principally by psychiatric residents and practicing psychiatrists, but also suitable as a reference for physicians in other specialties, and as an introduction to psychiatry for medical students. This edition is 20% larger than the first edition (1998), reflecting the substantial increase in the knowledge base of psychiatry. The multi-authored volume contains 45 chapters grouped into five sections: theoretical foundations; assessment; psychiatric disorders; psychiatric treatments; and special topics. As in the first edition, two appendices are included: the diagnostic criteria from DSM-IV and excerpts from the American Psychiatric Glossary. 7th edition. Annotation copyright by Book News, Inc., Portland, ORA convenient, up-to-date, time-saving reference for the diagnosis, psychopharmacologic treatment, and psychotherapeutic management of the full range of psychiatric disorders. Includes a highly useful separate section devoted to psychiatric disorders occurring in infancy, childhood, and adolescence. Extensive Index and detailed Table of Contents afford easy access to material. Copyright code: 8b6ee98b32f8f30b94fe32e0d0b98a609