Psychiatric Genetics (Review of Psychiatry)

Editors: Kenneth S. Kendler and Lindon Eaves

(2005). American Psychiatric Publishing, 240 pp, US\$36.95, ISBN 1585622281.

Psychiatric Genetics, edited by Kenneth Kendler and Lindon Eaves, is a concise text which presents a state-of-the-art summary on the genetics of schizophrenia, anxiety and substance-use disorders, and antisocial behavior.

The introduction by Kendler discusses the four paradigms in psychiatric genetics: basic genetic epidemiology, which quantifies familial and genetic risk; advanced genetic epidemiology, which explores the nature and mode of action of genetic risk factors; gene finding, which includes genetic linkage and association studies; and molecular genetics, which traces the biological mechanisms

and pathways by which DNA variants contribute to the liability to psychiatric disorders. Kendler discusses the interrelationships among the paradigms and the practical and conceptual difficulties of moving from paradigms 1 and 2 to paradigms 3 and 4, as it is not yet clear whether it is possible to move from genetic risk factors to susceptibility genes.

The second chapter by Eaves and colleagues is a 'user-friendly' treatment of models, methods and statistical approaches in genetic epidemiology, quantitative trait loci (QTL) studies, multivariate (including developmental) phenotypes and of issues that go beyond the additive model. There is a summary of

the genetic and environmental questions that provides the research agenda for the coming years and which concludes that psychiatric genetics cannot ignore the environment any more than developmental and social psychology can ignore the genes. This chapter is written in clear, nontechnical language and manages to sketch all relevant issues and go beyond simple additive models while remaining very accessible.

The remaining chapters are mainly written by scientists from the Virginia Institute for Psychiatric and Behavioral Genetics, and offer an easily accessible yet thorough review of topics in psychiatric genetics.

Psychopathology in the Genome and Neuroscience Era

Editors: Charles F. Zorumski and Eugene H. Rubin

 $(2005). American \ \textit{Psychiatric Association}, 240 \ \textit{pp}, \textit{US}\$54.00, \textit{ISBN } 1585622427.$

Psychopathology in the Genome and Neuroscience Era, edited by Charles Zorumski and Eugene Rubin, brings together selected topics in psychiatric genetics, diagnosis and prevention, and neurobiology. The last two chapters are devoted to education. The chapters in this book are based on talks by 20 international experts given at the March 2003 American Psychopathological Association annual meeting. The book has less

of a review approach, but instead discusses basic issues in the definition of the phenotypes studied in psychiatric genetics and addresses the importance of a conceptual shift from identifying major genes for mental disorders to gaining an understanding of the role genes play in susceptibility to mental disorders. The discussion on phenotypes can be seen as the continuation of an earlier conference volume by the same publisher (*Defining psychopathology in the*

21st Century. DSM-V and beyond [2002], edited by J. E. Helzer and J. J. Hudziak). Todd and colleagues contribute to the debate by describing an approach for the redefinition of early onset disorders (attention-deficit hyperactivity disorder and autism) based on latent class and factor analysis. McGuffin and Farmer focus on the phenotypic definition of schizophrenia and comorbid disorders. Issues of reliability and validity