Pharmacogenetics of Psychotropic Drugs


Pharmacogenetics of Psychotropic Drugs is an excellent book that will be of importance to anyone interested in this subject, regardless of their background knowledge in the area.

The book is divided into 7 sections: an introduction, clinical background and research design, molecular background, pharmacokinetics, specific psychotropic drugs and disorders, pharmacogenetics and brain imaging, and industry perspectives. The first 4 sections really serve as background information for the last 3. In the section examining specific medications used in psychiatry, we find an excellent review of the literature as it relates to pharmacogenetics and psychotropic medications. In addition to clozapine and antidepressants, this section also focuses on tardive dyskinesia, weight gain from antipsychotics, bipolar disorder, epilepsy, apolipoprotein E in Alzheimer’s disease, and drug dependence. Not only do the authors do an excellent job of summarizing the work that has been done in these areas, but the material has been written by those who are doing the research and know the data the best.

The section on brain imaging shows the reader where this research is headed and explains how the answers to current questions will help in the treatment of mental illness. Currently the marriage of brain imaging and pharmacogenetics is new. This section helps the reader to understand why pharmacogenetics may help to explain some of the imaging data already obtained, as well as aid in the design of future research and the resulting changes in clinical treatment. In section 7, “Industry Perspectives”, the data presented show the foresight of the book’s editor and authors, given that pharmacogenetics investigations are becoming more and more common in drug development. The pharmaceutical industry’s interest in pharmacogenetics has been growing steadily since the discovery of the polymorphic CYP2D6 isoenzyme. This chapter explains to the reader some of the techniques currently being used by industry to help us understand pharmacogenetics and response to psychiatric medications.

Overall, I was very excited to see that this book had been published. The whole research area of pharmacogenetics of psychotropic drugs is still in its infancy; to have all of these data compiled into one reference is a boon not only for the pharmacogenetics researcher, but also for the clinician who is trying to make sense of the science and its applicability to current practices in mental health. My hope is that the editor and authors of this book will strive to provide readers with updates as the field of pharmacogenetics in psychiatry continues to grow.

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