

stance abuse specialists, and to laypeople with a curiosity about drugs of abuse.

The book opens with a short description of how to define drug abuse and then turns to recent trends of drug use in the United States, providing a general description of the neurological aspects of drug use. The heart of the book is divided into specific chapters that discuss all of the major drugs of abuse: tobacco/nicotine, opioids, CNS depressants (alcohol, barbiturates, benzodiazepines, solvents, inhalants), marijuana, and CNS stimulants (cocaine, amphetamines). Of interest, there is an entire chapter dedicated to "club drugs," namely, gamma hydroxybutyrate, 3,4-methylenedioxymethamphetamine (Ecstasy), and ketamine.

Each chapter concisely and concretely describes the epidemiology, trends of use, and pharmacology of the drug of abuse. Special emphasis is placed on the toxic effects of drugs of abuse, including acute intoxication effects as well as long-term medical consequences.

Two new features of this edition are a chapter devoted entirely to the medical issues associated with drug abuse and an expansion of the chapter on drug abuse and the law. Particular emphasis is placed on infections obtained from intravenous drug use and the pulmonary effects of smoking drugs. The chapter examining drug abuse and the law succinctly summarizes the history of drug regulation in the United States and adds much-needed information about international drug laws.

Overall, this handbook is clearly written and presents the information in a well-organized and scientific fashion. Its brevity is appropriate, especially for the reader who is not a specialist in addictions. However, this is not the book to seek out for treatment; very little space is given over to how to treat substance-dependent individuals (this is not the book's purpose). Every significant drug of abuse is well covered and enough details are provided to familiarize or update the reader with accurate information. The only important drugs of abuse that are not described are anabolic steroids; a review of these would be particularly relevant given the recent attention placed on them by the media and popular culture. Finally, the book could use a concluding chapter and perhaps the addition of more illustrations, especially a visual depiction of the drug of abuse, to aid the reader. Nevertheless, the authors have done well to produce a work that is understandable to a wide audience and that is not weighed down in confusing research terminology.

TIMOTHY W. FONG, M.D.
Los Angeles, Calif.

Neurological Aspects of Substance Abuse, 2nd ed., by John C.M. Brust, M.D. Philadelphia, Elsevier Butterworth Heinemann, 2004, 477 pp., \$104.95.

This book is an excellent resource for issues related to substance abuse. It is highly informative and provides answers to the multiple treatment issues that arise on a daily basis in clinical practice. The author has made a huge effort in producing this book, beginning with the basic premise that most biomedical aspects of substance abuse are neurological. Each chapter has an exhaustive reference list. Historical snapshots for each substance of abuse are also provided.

This book compares the effects of substance use in animals and humans. The author uses a scientific approach based on pharmacology and animal studies to address the biomedical aspects of drug abuse, including overdose, withdrawal, medical and neurological complications, fetal effects, and pharmacotherapy. The book provides a fitting historical background related to each substance of abuse, its pharmacology, its neuronal effects, and its actions on various neurotransmitters. Insights are provided into the mechanics of addiction to substances of abuse resulting in the users feeling trapped as drug use becomes an important part of their daily activity.

The book consists of 13 outstanding chapters. Chapter 1 provides an overview of the definitions of dependence, addiction, abuse, and tolerance. The author addresses the triangle of psychic dependence, physical dependence, and social consequences correlated to neurobiological interactions that explain the resulting behavior.

Chapter 2 explores the neurobiology of addiction (new to this edition): "the loss of control over drug use, or the compulsive seeking and taking of drugs despite adverse consequences." It focuses on sensitization: "enhanced drug responsiveness with repeated exposure to a constant dose." In this chapter the author reviews animal models, neuroanatomy, neurotransmitters, neuromodulators, intracellular signaling, and rewards systems to explain behaviors. Chapters 3 to 13 are each dedicated to a single substance of abuse, including opioids, cocaine, anticholinergics, ethanol, and tobacco. Each chapter provides exhaustive knowledge on aspects of the particular substance of abuse such as origin, availability, receptor effects, addiction, withdrawal, fetal effects, organ damage, and treatment. The author also discusses public policy on individual drugs.

The book is very well balanced clinically, it grips the reader, and it is easy to read and understand. It is well written and based on the author's expert understanding of the field of substance abuse and the related neurobiology. Typographical errors and misspellings are rare, and the editing is of high quality. Overall, the information in this book is well organized, covering issues involving the common substances of abuse as well as the neurobiology of addictions. It is suggested reading for trainees, psychiatrists, and clinicians working in behavioral health. Family physicians, internists, and other physicians would also benefit because substance abuse is a common, often undiagnosed problem.

SADIQ AL-SAMARRAI, M.D.
SANJAY GUPTA, M.D.
Olean, N.Y.

Treating Alcohol and Drug Abuse: An Evidence Based Review, edited by Mats Berglund, Sten Thelander, and Egon Jonsson. Weinheim, Germany, Wiley-VCH, 2003, 629 pp., \$124.00.

This is a report of the findings of the Swedish Council on Technology Assessment in Health Care in the area of alcohol and substance abuse. The council evaluates the medical and scientific world literature on the technology and methods of intervention used in delivering health care. For the effort reported in this book, a team of 13 investigators performed a comprehensive literature search of articles published between the 1950s and 2000, rated more than 1,600 studies for