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Note: Sandra Patterson is the Editorial Director for the Journal.

Psychiatry, Psychoanalysis, and the New Biology of Mind, by Eric R. Kandel, M.D., with commentaries by Arnold M. Cooper, M.D., Steven E. Hyman, M.D., Thomas R. Insel, M.D., Donald F. Klein, M.D., Joseph LeDoux, Ph.D., Eric Nestler, M.D., John M. Oldham, M.D., Judith L. Rapoport, M.D., and Charles F. Zorumski, M.D. Washington, D.C., American Psychiatric Publishing, 2005, 414 pp., \$57.95.

Eric Kandel, University Professor at Columbia University College of Physicians and Surgeons, was awarded the 2000 Nobel Prize in Medicine or Physiology for his groundbreaking work on the molecular mechanisms underlying learning and memory. His discoveries, based on his initial studies of the sea snail *Aplysia* and later studies in mice, demonstrated that learning depends on changes in the strengths of synapses and that long-term, as opposed to short-term, memory requires the activation of a gene cascade that leads to the growth of new synaptic connections.

This book consists of seven of his previously published papers spanning the period between 1979 and 2000, as well as the commencement address he gave in 2001 to Columbia's graduating medical students. The papers focus on his neurobiological research, recommendations for new intellectual frameworks for psychiatry and psychoanalysis, and guidelines for future investigations in clinical psychiatry and psychoanalysis. Each paper is accompanied by commentary from leading psychiatrists and psychologists, some of whom are neuroscience researchers and some psychoanalysts.

The author's collected papers are preceded by a personal memoir of his undergraduate years at Harvard, when, fascinated by the insights of psychoanalysis, he decided to enter medical school in order to become a psychoanalyst. In medical school and later in his formal psychiatry training at the Massachusetts Mental Health Center in Boston in the late 1950s and 1960s, he became profoundly disappointed with the anti-intellectualism and biology-psychoanalysis dichotomy he encountered in American psychiatry. This disappointment contributed to his eventual decision to pursue neurobiological research instead of further clinical training.

He offers these essays with the "hope that molecular biology will provide a fresh perspective on the study of behavior and that the ensuing insights will lead to a new science of the mind, one that is grounded in the rigorous empirical framework of molecular biology yet incorporates the humanistic concepts of psychoanalysis." His afterword, written in 2004, underlines his hope that psychiatry and psychoanalysis will "again capture the best and brightest of the next generations" by joining with neuroscience to develop a true biology of the mind.

Today, it is easy to forget how revolutionary Kandel's work was in the late 1970s, when he reported his findings that experience could alter the brain. I vividly remember, during my second year of formal psychiatry training, hearing him present an early version of the first paper in the book, "Psychotherapy

and the Single Synapse." My colleagues and I were a bit incredulous that snails could teach us anything about the complexities of human beings. As Joseph LeDoux, the Henry and Lucy Moses Professor of Science at New York University, comments at a later point in the book, Kandel's work is taken for granted by neuroscientists today, but it was a "long shot in 1983."

For me, the heart of the book is "Biology and the Future of Psychoanalysis: A New Intellectual Framework for Psychiatry Revisited," originally published in 1999 in the *Journal* (1). Kandel specifies eight areas in which biology and psychoanalysis could cooperate: 1) the nature of unconscious mental processes, 2) the nature of psychological causality, 3) psychological causality and psychopathology, 4) early experience and the predisposition to mental illness, 5) the preconscious, the unconscious, and the prefrontal cortex, 6) sexual orientation, 7) psychotherapy and structural changes in the brain, and 8) psychopharmacology as an adjunct to psychoanalysis. Arnold Cooper, a training and supervisory analyst at the Columbia University Center for Psychoanalytic Training and Research, exhorts his colleagues to accept Kandel's challenge to study the "biology of subjectivity, consciousness, selfhood, and conflict."

The strength of this book is based on its clear descriptions of the neurobiological correlates and underpinnings of psychiatric clinical science and on its specific suggestions for areas of future research, especially related to what Kandel acknowledges as psychoanalytic insights. A limitation is that in some ways he is challenging an outdated version of psychoanalysis prevalent in the United States until at least the 1970s, when, indeed, many analysts behaved and taught as if the brain were not a relevant organ. Kandel himself quotes Anton Kris, who says that "one listens differently now." Contemporary medical educators would not recognize Kandel's characterization of medical student education as a model that focuses exclusively on teaching psychotherapy. Analysts would not universally accept Kandel's assumption that the highest aspiration of psychoanalysis is to become "the most cognitive of neural sciences." Cognition, as most analysts use the term, simply does not capture all of the concerns of psychoanalysis, including emotion, empathy, suffering, the development of selfhood, and the repetition of harmful or self-endangering behavior.

John Oldham describes Kandel's last essay as "eloquent, integrative, and visionary" but acknowledges that we are far from translating individual genetic and other information into real therapeutic outcomes. I wish that more of the commentaries had similarly focused on the complexities and challenges of translating Kandel's work into empirical clinical research, let alone clinical outcomes.

This hopeful and inspiring book will be especially useful for two groups—for teachers of medical students, psychiatric residents, and psychoanalytic candidates and for those trained in psychoanalysis who accept the challenge of psychoanalytic research. It is clear, succinct, illustrated by useful neurobiological models, and well referenced. It details many advances in our understanding of the way the brain works, specifically regarding learning and the formation of memories. Especially engaging are Kandel's vivid descriptions of his psychiatric training, his infectious enthusiasm for teaching, and his exhortations to study empirically the insights of psychoanalysis, which, he says "still represents the most coherent and intellectually satisfying view of the mind."

Reference

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MARY ANNE BADARACCO, M.D. Boston, Mass.

Clinical Manual of Addiction Psychopharmacology, edited by Henry R. Kranzler, M.D., and Domenic A. Ciraulo, M.D. Washington, D.C., American Psychiatric Publishing, 2005, 284 pp., \$52.95.

This manual is an excellent and comprehensive review of current knowledge on the psychopharmacology of addictive disorders. It consists of 10 chapters; nine address one class of substances each, and the tenth focuses on psychosocial treatments. Chapters are written by experts with extensive backgrounds in addiction treatment and research and include sections on the history and epidemiology of addictive disorders, diagnosis, pharmacokinetics, pharmacodynamics, neuropharmacology, treatment outcome, and other topics of interest to clinicians, researchers, administrators, and students. Extensive reference lists are found at the end of each chapter and include the most current as well as some of the older, important studies, with a few reaching back into the 1950s and 1960s. The chapter on psychosocial treatments is OK but does not have the depth and breadth of the others; it does not provide much historical information and misses points on therapist differences, psychiatric severity, the impact of the control condition on study outcome, the value of drug counseling, and the role of these treatments in HIV risk reduction.

I found the chapter on hallucinogens particularly interesting; there are so many of them with such varied "street" names and possible effects. I have always wondered why so many people have been so willing to take so many drugs with such profound, unpredictable, and potentially toxic effects.

This comprehensive, systematically organized manual is the best summary I have read on pharmacotherapies for the different addictive disorders and their various states of intoxication, withdrawal, and relapse prevention. The volume of work that has been done is impressive, as is the dispassionate way in which the data are presented. The end result is a manual of great depth and breadth that strikes an excellent balance between the scientific basis for using pharmacotherapies to treat addictive disorders and the results of treatment outcome studies and practical aspects of treatment. This manual is a valuable resource for those whose primary interest is research, treatment, or simply learning about the psychopharmacology of addiction.

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What Your Patients Need to Know About Psychiatric Medications, by Robert E. Hales, M.D., M.B.A., Stuart C. Yudofsky, M.D., and Robert H. Chew, Pharm.D. Washington, D.C., American Psychiatric Publishing, 2005, 356 pp., \$59.95 (paper).

With the explosion of interest in psychotropic medications, and the ready accessibility of information in popular books and the Internet, our patients ask increasingly sophisticated questions about the medications we prescribe. Many of these questions emerge from a level of knowledge that is highly—but not necessarily correctly—informed. One problem is that

a good deal of the material that is consumed by the public comes from people who may not be authoritative, some of whom have personal or political axes to grind. Patients can search databases such as MEDLINE or read the *Physicians' Desk Reference*, but these sources contain more data than most patients can absorb and evaluate.

This concise and information-packed book coauthored by two prominent leaders in psychiatry and a colleague in psychiatric pharmacy is an answer to psychotropic information (and misinformation) overload. In a readable and accessible format, the authors provide essential data about all of the currently available psychiatric medications. Following a brief introduction to the class of drug (e.g., antianxiety drugs, mood stabilizers), the authors provide information on mechanisms of action, applications, available preparations, dosing, common side effects, adverse reactions, drug interactions, use in pregnancy and breastfeeding, overdose, and how to take each medication. The book manages to provide just about everything a patient needs to know about each medication in just 4 pages. Space is provided at the end of each section for notes as patient and prescriber discuss the medication. A handout on each drug can be prepared by copying the page in the book or by printing it out from the CD provided, which contains a PDF of the book.

This book will be useful for clinicians who prescribe psychotropic medications in any setting, and it will be informative for their patients. It will be equally useful in nonpsychiatric settings, where it will ensure that patients are adequately informed about their treatment, and in psychiatric settings, where the handouts can serve as a source of authoritative data that patient and physician can expand upon. The authors are to be commended for producing such a universally useful volume.

In a book that is not encyclopedic, experts may disagree on what is and is not essential, but patients will agree that most of what is contained here is useful. Since information continually changes and new medications emerge (e.g., eszopiclone had not been released at the time this book was published), a future edition might provide periodic electronic updates and a means of adding notes to the electronic version. Each section has an engaging picture of a capsule in the title banner that might be changed to a picture of one or more of the actual pills available for the medication covered in that section. Regardless of editorial changes, *What Your Patients Need to Know* should become a valuable resource for practitioners and their patients.

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Adverse Events, Stress, and Litigation: A Physician's Guide, by Sara C. Charles, M.D., and Paul R. Frisch, J.D. New York, Oxford University Press, 2005, 272 pp., \$39.95.

The suicide of a patient is one of the worst adverse events in psychiatry and a tragedy for all whom it touches. Robert Simon opened his recent book on suicide risk assessment and management by acknowledging the painful truth: "There are only two kinds of clinical psychiatrists: those who have had patients commit suicide and those who will" (1, p. 1). Psychiatrists of patients who commit suicide are inevitably deeply affected by this irrevocable act. Thus, although it is not intended solely for a psychiatric audience, psychiatrists are