The Human Frontal Lobes: Functions and Disorders, 2nd ed.

edited by Bruce L. Miller, M.D., and Jeffrey L. Cummings, M.D. Guilford Press, New York, N.Y., 2007, 666 pages, $95.00 (trade cloth).

Knowledge of frontal lobe function and dysfunction is no longer optional for psychiatrists. Functional imaging has demonstrated the role of caudate and orbitofrontal cortex in obsessive-compulsive disorder, of dorsolateral prefrontal cortex in schizophrenia, and of medial-frontal cingulate areas in depression. Subfrontal deep brain stimulation is a promising treatment for refractory depression. Frontal/executive function is a major determinant of suitability and prognosis for psychiatric rehabilitation. Traumatic brain injury, with frontal-subcortical dysfunction among the principal sequelae, increases the risk of a number of psychiatric disorders.[1] Genetic syndromes that involve mental illness and frontal dysfunction are becoming known. It's time for psychiatrists to learn about the frontal lobes.

The second edition of *The Human Frontal Lobes* edited by Bruce Miller and Jeffrey Cummings is an encyclopedic work that allows the reader to become fluent in the literature of frontal function. Its 39 chapters by 70 authors are grouped into sections on anatomy, neurochemistry, neuroimaging, neuropsychology, frontotemporal dementias, other neurologic causes of frontal dysfunction, and psychiatric disorders. Each of these sections holds much for psychiatric clinicians. The chapter on frontal-subcortical circuits within the anatomy section reviews the relevance of this circuitry to each of the major groups of neuropsychiatric disorders as well as to attentional dysfunction. Within the neurochemistry section, one finds information on the interaction of serotonin, acetylcholine, and dopamine circuitry with frontal systems that facilitates understanding of psychopharmacologic effects, addictive behavior, and postulated psychiatric disease mechanisms. Although the imaging section is primarily a review of research findings, it deals specifically with what we have learned about episodic memory, autobiographical memory, planning, and other aspects of executive control. In addition to the latest work on neuropsychological testing of prefrontal function, the neuropsychology section contains chapters on social cognition, self-representation, and bedside frontal testing. There is information on neurosurgical approaches to psychiatric conditions, information on frontal lobe development in childhood, and, of course, a good deal of information about behavioral changes in neuropsychiatric disorders.

This reference is a testament to the indispensability of neuropsychological knowledge to neuropsychiatric understanding of disease. With this volume, the editors have made cutting edge neuropsychology accessible to psychiatrists and neurologists and the neuropsychiatric relevance of executive functioning accessible to neuropsychologists.

Each chapter reviews recent scientific advances with no assumptions as to the reader's preexisting depth of knowledge. Terms are defined, the prose is easy to follow, and the relevance to neuropsychiatry is typically explained, reflecting the degree of editorial oversight provided by Drs. Miller and Cummings. The editors are particularly well suited to their task. Dr. Miller is a widely published researcher in dementia and memory disorders whose work includes several contributions to the literature on frontal dysfunction in these disorders. Dr. Cummings is a dementia researcher and prolific neuropsychiatric author known for his ability to distill complex concepts into straightforward presentations.

A number of books have been compiled about frontal/executive function. I am familiar with none more comprehensive, nor any more inclusive of the functional concepts relating to frontal/executive function that would be valuable to well-informed psychiatrists, neurologists, and neuropsychologists, than this volume.

REFERENCE

1. Silver JM, Kramer R, Greenwald S, et al. The association between head injuries and psychiatric disorders: findings from the New Haven NIMH Epidemiologic Catchment Area Study. Brain Injury 2001; 15(11):935–945

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Concise Guide to Psychopharmacology, 2nd ed.

by Lauren B. Marangell, M.D., and James M. Martinez, M.D. APPI, Arlington, Va., 2006, 236 pages, $37.95 (paperback, pocket-size).

The American Psychiatric Association's *Concise Guide to Psychopharmacology*, second edition, is packed with tables and facts too numerous to be carried in memory. As such, it is a clear compendium of well-organized and useful information. It will sit on my desk within easy reach. For a psychiatric resident, it is like a pocket bible over a GI's heart, calming fears and deflecting otherwise lethal bullets encountered on rounds at the patient's bedside. It serves a similar function for the office clinician, whose detailed knowledge of medications either never existed or needs refreshing.

Larger books are for leisure; this concise guide helps when one is rushing and requires an immediate answer. All psychiatric drugs seem to be under increasing criticism. Previously disparaged were the barbiturates, meprobamate, the benzodiazepines, and the toxicity of the older antidepressants and antipsychotics; now, both the new antidepressants and second-generation antipsychotics are accused of harmful effects. It is good to have this objective guide as a voice of reason countering the newest newspaper criticism. If there is a hint of bias in this excellent book, it is against the benzodiazepines, which I think is unfortunate since they are still the most widely used psychiatric drugs and, I believe, the least toxic, although they are not effective for every mental disorder.

The Sequenced Treatment Alternatives to Relieve Depression (STAR*D) and Clinical Antipsychotic Trials Intervention Effectiveness (CATIE) studies are too new to be included in this second edition and are busily being discussed and evaluated by the field. Physicians need to know what to do next when an initial treatment attempt fails. Algorithms, those step-by-step problem-solving procedures to address such difficulties, are spelled out in this excellent book, but they are based on the available theories regarding mechanisms of drug action, rather than facts supported by scientific observation. The lack of impressive results revealed not only by the STAR*D and CATIE studies but by scores of others indicate the 50-year-old drug categorizations may have been refined and reworked to the point of diminishing returns. The laboratory-bound researchers must yield their eminence to a new generation of clinicians who observe everyday patients. Then, perhaps, more wonderful,

serendipitous findings, such as those made by Rolland Kuhn (imipramine), Jean Delay and others (chlorpromazine), and John Cade (lithium), might spring forward.

If the *Concise Guide to Psychopharmacology*, supported by randomized controlled trials, rating scales, and references to dopamine, serotonin, norepinephrine, second messengers, RNA, and DNA, is a kind of scientific bible, then psychopharmacology may require a new atheism, in which highfalutin language is replaced by careful clinical observation of each patient's response to our drugs. More revealing than scientific-appearing scales are simple questions such as, "Is the drug helping you?" and "Are you sleeping better, feeling less frightened, more hopeful, able to think more clearly, and better able to work and take care of your family?" The pompous language of science cannot hide the fact that our disorders are named by a consensus of expert committees that periodically change them not in response to startling new discoveries but by haggling much like politicians do. Even worse, we have no penicillin with which to treat our patients, a drug, incidentally, that never required a randomized controlled trial to prove its effectiveness.

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