Introduction to Neuropsychopharmacology, *by Leslie L. Iversen, Susan D. Iversen, Floyd E. Bloom, and Robert H. Roth. Oxford University Press, 2008, 576 pp., $45.00.*

The legendary *Biochemical Basis of Neuropharmacology*, better known as "Cooper Bloom and Roth," served as *the* gateway textbook of neuroscience research for several generations of basic and clinical scientists beginning in the 1980s. Its mix of introductory information on neuroanatomy, biochemistry, and pharmacology made the book accessible to students and clinicians with diverse scientific backgrounds. Its primary emphasis was on defining the mechanisms through which psychoactive drugs work—in other words, how drugs that affect behavior affect the brain. It was also the first practical textbook to integrate fundamental neuroscience into psychiatry. It was therefore one of the first textbooks with a translational approach to neuroscience. To this day, it remains my most frequently "borrowed" textbook. My cherished copy of the seventh edition, which was signed by Bob Roth, does not leave my office, as copies of other editions have had the habit of disappearing. The fact that the eighth edition was to be its last was disquieting to those of us who have depended on it as a reference and used it heavily in teaching. For me, at least, this had been the one common book I had used for teaching of neuropharmacology and neurochemistry to undergraduates, graduate and medical students, and psychiatric residents. It is therefore with great anticipation that we welcome a new book with the same fundamental mission, written with the help of two additional neuropharmacology legends, Susan Iverson and Leslie Iverson.

Introduction to Neuropharmacology begins with several informative introductory chapters that summarize pertinent multidisciplinary information on cytology and bioelectrical properties of neurons, synaptic transduction, behavioral models, and basic pharmacology. Although this information is brief, it is a masterful compilation of the fundamental background needed to move on to subsequent specialized chapters. The next eight chapters review the neuropharmacology of specific neurotransmitter and neuromodulator systems. This section is informative and provides excellent reference material related to synthesis and degradation, morphology, pharmacology, and the signal transduction mechanisms associated with these neuronal systems. The chapters on monoamines are especially thorough and well written, and cover classic pharmacology as well as some of the recent advances from human imaging and genetics studies. The one shortcoming of this section is that some of the key neuronal systems that are relatively new to the field are barely covered. This includes neurotrophic factors, such as brain-derived neurotrophic factor and their receptor targets, which are thought to play an important role in normal development and plasticity as well as in psychiatric disorders. The endocannabinoid system also does not get the attention it deserves given that the primary receptor targeted by endocannabinoids in the brain (CB1 receptor) is the most abundant G-protein coupled receptor in the cerebral cortex, and its manipulation, such as with the drug rimonabant, has been associated with several behavioral and therapeutic effects.

The next seven chapters focus on the pharmacology of therapeutic compounds for both psychiatric and neurological disorders. This section starts with an introductory chapter on the principles of CNS drug development, which is one of my favorite chapters of this book because it provides a very helpful and practical description of how a drug makes it from animal modeling and preclinical testing to phase III clinical trials. In addition to describing the mechanisms of action for existing drugs, they discuss novel approaches and compounds that are in the pipeline. The remaining chapters in this section focus on specific disorders and are quite informative, although at times I was puzzled by their decision to group specific disorders together. For example Alzheimer's disease was combined with attention deficit hyperactivity disorder in a chapter titled "Cognitive Disorders." This was confusing as these disorders are not unique in their manifestation of cognitive deficits, and they involve quite different symptoms and treatment profiles. Nonetheless, the chapter contains an excellent review of our current understanding of their pathophysiologies along with relevant treatment options.

The book ends with seven chapters on the pharmacology of recreational psychoactive drugs. Although this coverage might seem excessive, understanding the pharmacology of these drugs has been instrumental in advancing our knowledge of the neuronal basis of behavior. The fact that drug abuse is comorbid with most psychiatric disorders also supports a heavy emphasis on this topic.

Neuropharmacology remains fundamental to psychiatry and is one of the most heavily applied fields in neuroscience because drug actions remain the primary tool through which we can understand the neuronal basis of behavior. While this book is not a comprehensive survey of neuropharmacology, it has just the right amount of information to introduce and expand upon the subject for the novice and provide a refresher to those who have studied the subject previously. Its translational approach, which often includes a survey of the animal experiments that led to the discovery of therapeutic drugs, makes it an invaluable resource for teaching and to those unfamiliar with the basic methodologies used in psychiatric drug discovery.

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The Interpersonal Theory of Suicide: Guidance for Working With Suicidal Clients, *by Thomas E. Joiner Jr., Kimberly A. Van Orden, Tracy K. Witte, and M. David Rudd. Washington, D.C., American Psychological Association, 2009, 246 pp., $59.95.*

As stated in its introduction, the purpose of this book is "to demystify clinical work with suicidal patients by grounding this work within a model of suicidal behaviors, the Interpersonal Theory of Suicide" (p. 3). The reason why people kill themselves, according to Dr. Joiner's theory, is "because they can and because they want to—because they develop both the desire and the capability to do so" (p. 4). Luckily, lethal self-injury is associated with so much fear and pain that few people are capable of it. Thus, only those with both the capa-

bility and the desire are at risk, according to the theory. Perceived burdensomeness and failed belongingness compose the construct of suicidal desire and are thought to be more fluid and dynamic than acquired capability. Suicidal desire is proposed to be more malleable and responsive to short-term intervention than capability.

Dr. Joiner lays out the "Clinical Terrain Covered in This Guidebook" (p. 4) in six chapters. Chapter 1 focuses on the DSM diagnoses that are more commonly associated with suicidal behavior than others, that is, the "major five" (p. 21), including major depressive disorder, bipolar disorder, schizophrenia, anorexia nervosa, and borderline personality disorder. Ninety percent of individuals who die by suicide have an axis I mental disorder (p. 22); thus, knowledge of each disorder and the literature concerning suicidal ideation/behavior associated with each are important. Although not an exhaustive discussion of each disorder, certainly a respectable amount of data is presented.

Chapter 2 offers the author's recommendations on what information should be gathered in the process of suicide risk assessments, as well as how to optimally obtain and analyze the information. Neither being an alarmist nor ignoring symptoms is recommended. Warning signs have been published over time; these are imprecise and may result in a high number of false positives. Although not particularly problematic for the general public, the clinician is in a different situation, needing to provide a more accurate assessment. "Suicide risk assessment frameworks, therefore, are formalized procedures for clinicians, i.e., indications of what signs or symptoms to assess and what questions to ask, how to combine information on current and past symptoms to determine current risk and indications of what actions to take given risk designations. The primary goal of these frameworks is to establish the degree of current risk of suicide, including the presence or absence of clear and imminent risk" (p. 56).

The theory proposes that clinicians should assess two main domains: desire for suicide and capability for suicide. Specific questions as well as scales for both desire and capability are presented, along with a summary of each dimension. Capability is divided into acquired capability over the long term as well as current indicators, such as high intent for suicide or fearlessness about suicide. Lastly, a "Risk Assessment Decision Tree" (p. 68) is presented, along with directions for an interview to complete the tree. Examples are provided as benchmarks to rank suicide risk as low, moderate, or high, with either severe or extreme qualification.

Other risk assessment frameworks, such as the Collaborative Assessment and Management of Suicidality, the Chronological Assessment of Suicide Events (CASE) (p. 64), as well as the University of Washington Risk Assessment Protocol (p. 66), are presented and compared to the Interpersonal Theory of Suicide Risk Assessment. Common themes in risk assessments include the role of rapport between clinician and client, the need to assess planning and preparation as potential signs of imminent risk, and the decision tree. "Risk frameworks are most useful when they not only provide guidelines on what domains to assess but guide clinicians in determining levels of risk and choosing appropriate interventions" (p. 80).

Chapters 3, 4, and 5 address treatment. Chapter 3 describes crisis intervention strategies and techniques through the lens of the theory. A crisis is defined as a situation in which "an individual is experiencing intense thoughts about suicide, combined with dysphoria and the subjective experience that he or she cannot cope effectively with these emotions, and will act on his or her suicidal thoughts" (p. 84). A main goal is to moderate the pain of the current crisis so that it is within a tolerable range. Each level of risk, from low to high risk as described in chapter 2, is addressed with specific tools, such as providing emergency numbers like the National Suicide Prevention Lifeline for low risk or creating a "crisis card" (p. 95). An example of an intervention in the moderate risk group may be completing a "symptom-matching hierarchy" (p. 99), such as engaging in pleasant activities to address hopelessness. I was impressed by the matching of the level of intervention with the level of risk.

Chapter 4 focuses on treatments that work for suicidal behavior and surveys various treatment approaches. Descriptions of evidenced-based therapies are presented and include cognitive therapies, dialectical behavioral therapy, problem-solving therapy, multisystemic therapy, and partial hospitalization with psychoanalytic focus, as well as interpersonal and mindfulness-based cognitive therapy, which have preliminary data. Dr. Joiner presents his own open trial data addressing all aspects of his model of suicide. As he describes it, his approach seems easy to teach, learn, and implement. The three main principles are assessing interpersonal problems, supporting motivation for treatment, and increasing self-control.

Chapter 5 focuses on the therapeutic relationship. "The goal in using a stance that emphasizes a blend of collaboration and self-determination is to create a therapeutic environment that facilitates motivation for therapy and also directly targets sources of suicidal desire" (p. 146). A discussion of how much availability clinicians should offer between sessions based on patient needs and personal limitations is presented.

Chapter 6 offers a broader perspective on the interpersonal theory by addressing suicide prevention and public health campaigns. Sixty-eight percent of people who die by suicide were not seen in a mental health setting during the 12 months preceding their death (p. 167). Thus, a more multifaceted approach is needed. Possibilities of universal prevention strategies like getting rid of weapons or erecting barriers at high-risk locations are options that have limitations, as Dr. Joiner points out. The importance of interpersonal relationships is emphasized. Facilitating hope in the process of assessment and treatment is paramount. Dr. Joiner makes a compelling case that his treatment model can engender hope in suicidal patients.

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