

disorders considered are schizophrenia, bipolar disorder, autism, attention deficit hyperactivity disorder (ADHD), anorexia nervosa, and frontotemporal dementia. Often reconceptualizing the essences of the respective illnesses through recent evolutionary and neurobiological advances, these explorations are exhilarating. For example, they convincingly posit that ADHD is a primary deficit in motivation rather than a deficit in attention. In making their case, the authors deftly review the recent research revelations about the neurocircuitry, neurogenetics, neurobiology, and neuropathology of the brain's primary reward system—the dopamine system—as it would relate to the symptoms and treatment of patients with ADHD.

In chapters 8–12, Professors Williamson and Allman highlight and explicate what could be considered “hot topics” in the social, cognitive, and behavioral neurosciences from neuropsychiatric and evolutionary biological perspectives. Such intriguing concepts as “the social brain,” “stimulus independent thought,” and “default networks” are explored, and vexing questions such as “Do animals have a theory of mind?” are raised and answers tendered. Insights about the human brain are sought through the neuroanalysis of humor, empathy, disgust, embarrassment, and intuition in people with and without neuropsychiatric illness.

This reviewer, however, was somewhat surprised by important foci of human thought and emotion that were *not* considered, such as music, art, poetry, storytelling, and religion/spirituality. These uniquely human preoccupations would also seem worthy probes to expose the “nature of the human brain.” In the totality of their deliberations, there seems to be an imbalance between what is conventionally considered the “neuro” at the expense of the “psych.” Notwithstanding this notion, the volume is a compact (168 pages of text, 61 pages of references), captivating, and current update of vital scientific advances that reflect upon the uniqueness of the human brain, mind, and condition. I highly recommend this book to students and practitioners of neurology, psychiatry, and neuropsychiatry as well as to others interested in understanding the unique nature of the remarkable human brain.

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***How to Talk with Families About Genetics and Psychiatric Illness*, by Holly Peay and Jehannine Austin. New York, W.W. Norton and Company, 2011, 280 pp., \$24.95.**

Patients who suffer with psychiatric illness often have questions about how the illness developed and the risks for

other family members becoming affected. *How to Talk with Families About Genetics and Psychiatric Illness* responds to the increasing need for mental health clinicians to help families deal with these common questions, often based upon concepts from genetic medicine. The authors directly address the new psychiatric genetic research in an accessible manner and how, together with an individual's personal and family psychiatric history, genetics can provide information about likely causes of mental illness and the magnitude of risk. The book also provides guidance regarding how to initiate conversations when the clinician suspects that genetic information may address a patient's unspoken concern or help him or her cope or adapt to mental illness.

Peay and Austin do not claim to equip clinicians to become genetic counselors, but the book does provide a basic overview of genetics 101 that is a useful resource for clinicians. One example of a particularly helpful tool that they have developed for explaining the etiology of mental illness is the “jar model.” The jar is a simple visual analogy to explain the two factors—genetic and environmental—that contribute to mental illness. The picture of the jar depicts how mental illness can develop in a way that anyone can understand, especially for those who do not have a good grasp of numbers. Moreover, I expect that their model will be particularly useful in explaining vulnerability factors to participants in my current research on informed consent for psychiatric genetic research.

Following genetics 101, each chapter of the book is organized to provide examples of common questions and answers about psychiatric genetics. The earlier chapters are written for clinicians to use to discuss possible genetic contributions to the development and/or inheritance of mental illness. By way of example, Chapter 2 provides questions to assist the clinician who is not accustomed to talking about the genetics of mental illness while respecting a patient's right to not know as an option. Later chapters focus on common questions from the patient perspective. For example, one question that Chapter 6 addresses is “Why did you tell me that you think my risk to develop psychiatric illness is probably less than the 15% risk I found on the Internet?” In this example, the authors provide ways to explain to the patient about averaged risks and that in his or her case the clinician should also take into consideration the information provided that modifies risk for this unique situation.

In addition, each chapter includes pertinent cases from Peay's and Austin's experience in genetic counseling. The cases bring each chapter's discussion around a particular topic to a conclusion, often including family history and the graphic pedigree. In Chapter 8 and Chapter 9, the cases focus on the subject of pregnancy and parents of at-risk children and affected children. One case involves parents who are both physicians and have an autistic child; they are expecting a second child. The authors explain how the clinician could address the parents' questions about the etiology of autism and a conversation about how the parents might manage the uncertainty regarding the baby's condition for the remainder of the pregnancy and early in the baby's life. Other chapters include cases about unaffected family members, genetic susceptibility testing, and genetic testing to inform medication strategy.

While the consistent format of the book involves some redundancy for one who reads it from cover to cover, the layout increases its value as a resource on specific topics. *How to Talk*

*with Families About Genetics and Psychiatric Illness* is a good source for mental health clinicians seeking assistance with common questions and also for unique situations that may arise in the course of practice. Genetic medicine is relatively new, and many clinicians self-report that they are uncomfortable with the coming onslaught of enormous amounts of data. For these reasons, the book's experienced-based discussions on a wide variety of topics can be extremely helpful in providing methods to clarify the issues.

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***Psychiatry in Indiana: The First 175 Years***, by Philip M. Coons, M.D., and Elizabeth S. Bowman, M.D. New York, iUniverse, Inc., 2010, 296 pp., \$21.95.

The 20th-century discipline of psychiatry in Indiana evolved from neurology. The Indiana Neuropsychiatric Association was founded in 1938 and was open to any physician who listed a P, an N, or an NP after his name in the American Medical Association directory. Many of the early members were neurologists. The association became a district branch of the American Psychiatric Association (APA) in 1954 and renamed itself the Indiana Psychiatric Society in 1965.

Academically, the process was similar. Although the Indiana University School of Medicine was founded in 1903, there were no full-time instructors in psychiatry until 1939–1940, at which time psychiatry became a division of neuropsychiatry. The neuropsychiatry department was formally separated into the neurology and psychiatry departments in 1952.

Indiana has no psychoanalytic tradition. There is no psychoanalytic institute or organization as there is in the nearby cities of Cincinnati and Chicago. There have generally been only one to two analysts practicing at any given time in metropolitan Indianapolis. Early 20th-century treatments in Indiana institutions included hydrotherapy, malarial therapy for syphilis, and insulin and metrazol shock therapies. In the late 1940s, most of the patients at Norways sanitarium, the major private psychiatric hospital in Indiana, were receiving ECT, metrazol, or insulin coma therapy. During 1952–1954, more than 300 lobotomies were performed at Logansport State Hospital, many using the trans-orbital technique developed by Dr. Walter Freeman. Most patients were said to have improved with this procedure, though later it fell into disrepute. In the mid-1950s, Indiana institutions began wide use of thorazine and other psychotropics, as they were also widely used in the rest of the nation.

The lack of attention to psychoanalysis and emphasis on somatic treatments is one distinctive feature of *Psychiatry in Indiana*. Indiana also has the dubious distinction of passing the first eugenic sterilization law in the United States in 1907. The involuntary procedure was not finally eliminated until 1974. Under the law, 1,167 men and 1,257 women were sterilized, mostly prior to 1955; most sterilized individuals were intellectually disabled. The sterilizations were carried out at

state hospitals, developmental centers, and correctional institutions.

At the same time, Indiana was a pioneer state in biological psychiatry. A pathology laboratory was built on the grounds of Central State Hospital in 1895. The Laboratory Building was the location of psychiatry research and teaching for the Indiana University School of Medicine until the early 1950s. For many years, brain specimens from patients with psychiatric disorders were preserved and studied here.

Margaret Morgan, M.D., was named the first state Commissioner of Mental Health in 1953. Along with Governor George Craig, she planned and built one of the first dedicated research institutes in psychiatry on the Indiana University Medical Center campus in 1956. Within several years, the Institute of Psychiatric Research supported the work of six full-time and four part-time scientists, as well as five consultants. The emphasis was on basic studies of neurochemistry and behavior; the staff was about one-half Ph.D.s and one-half psychiatrists and neurologists.

In the mid-1960s, Drs. Joyce and Iver Small arrived at LaRue Carter Hospital on the Indiana University campus. They revitalized the Research Service at Carter and carried out extensive studies on ECT, lithium, carbamazepine, clozapine, and electroencephalographic correlates of psychiatric disorders and treatment over the next 40 years.

Coons and Bowman, the authors, have concentrated on developments in psychiatry between 1800 and 1975. Philip Coons is a forensic psychiatrist who has been a longtime faculty member at Indiana University. His wife, Elizabeth Bowman, is adjunct professor of neurology at the University, having spent many years on the psychiatry faculty as well. Both are past presidents of the International Society for the Study of Trauma and Dissociation and have received awards from that society. Bowman also holds a Master of Sacred Theology degree and has received APA's Oskar Pfister Award for work integrating religion and psychiatry. They have been working on this history for several decades.

I found the book to be a surprisingly fascinating read. There are a number of interesting topics and discussions. As an example, Logansport State Hospital was built in the late 19th century to be an economically self-sufficient facility. It was sited attractively on a bluff overlooking the Wabash River. Cattle, pigs, chickens, turkeys, rabbits, and ducks were raised on the hospital farm. The gardens produced 178,000 tomato plants and 272,960 cabbage plants during 1 year in the 1940s; the hospital had a cannery for preserving fruits and vegetables. The 1954 patient population was 2,448. In 1968, the farming operation ceased. The census in 2009 reported 327 patients at Logansport.

As Coons and Bowman point out, criticism of the state hospitals seems to run in cycles. One such cycle occurred in the years following World War II. In 1946, *Life Magazine* ran an article exposing abuse and neglect in the 180 state mental institutions across the country (housing 400,000 patients). This aroused public indignation (and legislative appropriations), and 5 years later, a follow-up article in *Life* found conditions much improved. They cited Logansport as one of the success stories. Forty years later, more negative attention focused on Indiana state hospitals. In particular, Central State in Indianapolis was the subject of periodic scandals. The hospital was closed in 1994 by Governor Evan Bayh, with the idea that