

Neurobiology of TRP Channels. Edited by Tamara Luti Rosenbaum Emir. Boca Raton, Florida: CRC Press; 2017. US \$179.95 (Hardcover). 327 p. ISBN: 978-1498755245

The field studying transient receptor potential (TRP) channels, while less than fifty years old, has grown precipitously in the past few decades, revealing roles for these channels across multiple organ systems and sensory modalities. Editor Tamara Luti Rosenbaum Emir, along with a multitude of authors who are experts in their fields, truly capture the scope and complexity of these channels in the book, *Neurobiology of TRP Channels*.

The book offers a comprehensive overview of TRP channels starting from the differences in basic structure and amino acid sequence between TRP channel subfamilies. Following this introductory chapter, the book opens up into a more loosely structured format in which the chapter topics range from molecular mechanisms of ion channel gating to roles of TRP channels in specific organs as well as the role of these channels in more complex processes such as perception and ageing. The text is also thorough in how it breaks down each chapter. For example, in chapter 8 of the book, titled “*TRP Channels and Pain*,” the authors break down the chapter by addressing each variant of TRP channels involved in pain signaling separately. Not only that, each subsection pertaining to the individual channel variants are further divided into different forms of pain, such as inflammatory pain versus neuropathic pain. This pattern is generally maintained throughout the entirety of the book. Similarly, in sections that are centered on the role of TRP channels in individual organs, the chapter begins by explaining the normal function of TRP channels within the organ before diving into how the channels are involved in the pathophysiology of relevant disease states. This organization presents a clear step by the authors to delineate complicated, and oftentimes overlapping, signaling cascades as much as possible.

Furthermore, each focus chapter contains individual headings that describe smaller subtopics. This is particularly helpful in combination with the well-referenced text such that the publications and research behind the text may be easily accessible. At the end of each chapter there is an extensive list of detailed references that make it a great tool for those seeking to understand the original experimentation that informs our current knowledge

of TRP channels. The figures, while a bit sparse, range from schematics and cartoons detailing the structure of TRP channels to figures taken from previously published work. The inclusion of published work in particular establishes a clear line from the data to the assertions made from these data. The book also contains a color insert in the middle in order to better distinguish multiple components in denser figures.

That being said, the best audience for *Neurobiology of TRP Channels* is likely to be experienced students that have taken foundational courses in cellular neuroscience and neurophysiology. Moreover, the book dives into a lot of technical details from the publications that contributed to the current knowledge of TRP channels, so fundamental understanding of genetic manipulation and modern cell biology may also be required. In this way, the book may serve best as a reference, as the concepts from chapter to chapter do not necessarily build off one another as books covering larger, broader topics often do.

Altogether this text is a great resource for those seeking a categorical summarization of our current understanding of TRP channels as well as the research that has allowed the field to take off in such a short period of time.

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Constructing Pain: Historical, Psychological, and Critical Perspectives (Critical Approaches to Health). By Robert Kugelmann. New York, NY: Routledge, 2017. US \$52.95 (Paperback). 155 p. ISBN: 978-1138841222

In *Constructing Pain: Historical, Psychological, and Critical Perspectives*, Kugelmann artfully weaves together multiple disciplines—history, literature, medicine, psychology, and social narratives from his research—to broaden the contemporary conceptualization of pain. The account is divided into two parts. In part one, Kugelmann identifies sociocultural forces that he feels shaped collective understandings of pain in the 19th and 20th centuries. By drawing evidence from a rich variety of sources including etymology, historical events, poetry, and literature, Kugelmann articulates how perspectives about the

significance and transience of pain have evolved with the times. Although Kugelmann attempts to thoroughly capture social evaluations of pain through this approach, the bulk of perspectives gathered are representative of only a small sector of society—namely, of academic circles. While the views of prominent figures such as Descartes, Bentham, and Henry Rutgers Marshall offer valuable insight about past beliefs, including voices of non-academics and of people outside of the western world would provide a fuller and more well-rounded account of the understandings of pain.

In part two of the text, Kugelmann establishes the importance of an interdisciplinary construction of pain by exploring the subjective experiences of individuals gathered from his own research. Although these narratives provide compelling insight into individual experiences with pain, in light of how personal each experience is, Kugelmann's methods of extracting meaning from these narratives to form generalizable conclusions about social evaluations of pain is somewhat questionable and not thoroughly convincing.

Additionally, although Kugelmann's progression of ideas demonstrate profound thoughtfulness and reasoning, his writing may be less accessible to clinicians with limited background in psychology. At times, the jargon and prose, to some degree, detracted from the meaningful arguments presented. Nevertheless, the insights that Kugelmann presents in this book would be valuable for health care team members to gain an understanding and appreciation of the ever-evolving, polymorphous nature of pain.

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Substance and Behavioral Addictions: Concepts, Causes and Cures. By Steve Sussman. Cambridge University Press: Cambridge, UK, 2017. US \$49.41 (Paperback). 404 p. ISBN: 978-1107495913.

Substance and Behavioral Addictions: Concepts, Causes and Cures addresses a subject matter that is pervasive in society. Addiction is often highlighted in the media in the context of celebrities' struggles, but the disease indirectly or directly affects the general population on a daily basis. The author discusses the complexity of the development of addiction through the lens of the "PACE model" (pragmatics, attraction, communication, expectations). The 11 addictions that are covered in the book include: tobacco use, alcohol use, hard drug use, food eating, gambling, Internet and other electronic media, shopping, love, sex, exercise, and work.

The content of the text is organized in to three different sections that touch on various aspects of addiction. "Part I: Addiction and Addictive Effects" introduces the titular concepts, as well as appetitive needs, the variables the increase that likelihood of developing addiction, and the consequences of addiction. In "Part II: Types of Addiction," a general overview of addictions is provided. Additionally, the prevalence and co-occurrence of substance and behavioral addictions is reviewed, followed by a chapter that talks about the 11 focal addictions introduced earlier. In the last section, "Part III: Resolving the Problems of Addiction and Future Directions," general principles of issues associated with addiction are highlighted. There is an exploration of approaches to prevention and cessation, on both intrapersonal- and extrapersonal-levels. The last chapter examines future considerations for substance and behavioral addictions and how the "translation-transdisciplinary research matrix" can be utilized to develop a better understanding about the topic.

The book is designed for upper-level undergraduate and graduate students, researchers, and practitioners who want to learn about the basis and scope of addiction. The biological, chemical, and evolutionary aspects of addiction are considered by the author, who relays the information from a multidisciplinary perspective. The material of this book provides greater knowledge about the background and implications of addiction, which is relevant for patients and providers alike. Readers will find *Substance and Behavioral Addictions: Concepts, Causes and Cures* substantive and digestible, and a worthwhile source as a whole.

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