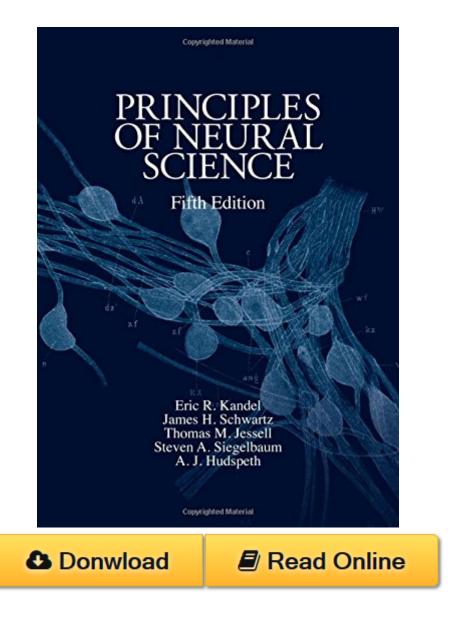
Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) PDF



Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) by ISBN 0071390111

Now updated: the definitive neuroscience resource?from Eric R. Kandel, MD (winner of the Nobel Prize in 2000); James H. Schwartz, MD, PhD; Thomas M. Jessell, PhD; Steven A. Siegelbaum, PhD; and A. J. Hudspeth, PhD

A Doody's Core Title for 2015!

900 full-color illustrations

Deciphering the link between the human brain and behavior has always been one of the most

intriguing?and often challenging?aspects of scientific endeavor. The sequencing of the human genome, and advances in molecular biology, have illuminated the pathogenesis of many neurological diseases and have propelled our knowledge of how the brain controls behavior.

To grasp the wider implications of these developments and gain a fundamental understanding of this dynamic, fast-moving field, *Principles of Neuroscience* stands alone as the most authoritative and indispensible resource of its kind.

In this classic text, prominent researchers in the field expertly survey the entire spectrum of neural science, giving an up-to-date, unparalleled view of the discipline for anyone who studies brain and mind. Here, in one remarkable volume, is the current state of neural science knowledge?ranging from molecules and cells, to anatomic structures and systems, to the senses and cognitive functions?all supported by more than 900 precise, full-color illustrations. In addition to clarifying complex topics, the book also benefits from a cohesive organization, beginning with an insightful overview of the interrelationships between the brain, nervous system, genes, and behavior. Principles of Neural Science then proceeds with an in-depth examination of the molecular and cellular biology of nerve cells, synaptic transmission, and the neural basis of cognition. The remaining sections illuminate how cells, molecules, and systems give us sight, hearing, touch, movement, thought, learning, memories, and emotions.

The new fifth edition of *Principles of Neural Science* is thoroughly updated to reflect the tremendous amount of research, and the very latest clinical perspectives, that have significantly transformed the field within the last decade.

Ultimately, *Principles of Neural Science* affirms that all behavior is an expression of neural activity, and that the future of clinical neurology and psychiatry hinges on the progress of neural science. Far exceeding the scope and scholarship of similar texts, this unmatched guide offers a commanding, scientifically rigorous perspective on the molecular mechanisms of neural function and disease?one that you'll continually rely on to advance your comprehension of brain, mind, and behavior.

FEATURES

- The cornerstone reference in the field of neuroscience that explains how the nerves, brain, and mind function
- Clear emphasis on how behavior can be examined through the electrical activity of both individual neurons and systems of nerve cells
- Current focus on molecular biology as a tool for probing the pathogenesis of many neurological diseases, including muscular dystrophy, Huntington disease, and certain forms of Alzheimer's disease
- More than 900 engaging full-color illustrations?including line drawings, radiographs, micrographs, and medical photographs clarify often-complex neuroscience concepts
- Outstanding section on the development and emergence of behavior, including important coverage of brain damage repair, the sexual differentiation of the nervous system, and the aging brain
- NEW! More detailed discussions of cognitive and behavioral functions, and an expanded review of cognitive processes
- NEW! A focus on the increasing importance of computational neural science, which enhances our ability to record the brain's electrical activity and study cognitive processes more directly
- NEW! Chapter-opening Key Concepts provide a convenient, study-enhancing introduction to the

material covered in each chapter

- Selected Readings and full reference citations at the close of each chapter facilitate further study and research
- Helpful appendices highlight basic circuit theory; the neurological examination of the patient; circulation of the brain; the blood-brain barrier, choroid plexus, and cerebrospinal fluid; neural networks; and theoretical approaches to neuroscience/ul>

Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) Review

This Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) book is not really ordinary book, you have it then the world is in your hands. The benefit you get by reading this book is actually information inside this reserve incredible fresh, you will get information which is getting deeper an individual read a lot of information you will get. This kind of Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) without we recognize teach the one who looking at it become critical in imagining and analyzing. Don't be worry Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) can bring any time you are and not make your tote space or bookshelves' grow to be full because you can have it inside your lovely laptop even cell phone. This Principles of Neural Science, Fifth Edition (Principles of Neural Science (Kandel)) having great arrangement in word and layout, so you will not really feel uninterested in reading.