

《神经科学》

图书基本信息

书名：《神经科学》

13位ISBN编号：9787040317268

10位ISBN编号：7040317265

出版时间：2011-2-1

出版社：高等教育出版社

作者：Mark F. Bear, Barry W. Connors, Michael A. Paradiso

页数：857

版权说明：本站所提供下载的PDF图书仅提供预览和简介以及在线试读，请支持正版图书。

更多资源请访问：www.tushu000.com

《神经科学》

作者简介

作者：（美国）贝尔（Mark F.Bear）（美国）柯勒斯（Barry W.Connors）（美国）帕罗蒂斯（Michael A.Paradiso）

书籍目录

Preface	
User's Guide	
Acknowledgments	
Path of Discovery Authors	
Part 1 Foundations	
Chapter 1 Neuroscience: Past, Present, and Future	3
Chapter 2 Neurons and Glia	23
Chapter 3 The Neuronal Membrane at Rest	51
Chapter 4 The Action Potential	75
Chapter 5 Synaptic Transmission	101
Chapter 6 Neurotransmitter Systems	133
Chapter 7 The Structure of the Nervous System	167
Appendix: An Illustrated Guide to Human Neuroanatomy	205
Part 2 Sensory and Motor Systems	249
Chapter 8 The Chemical Senses	251
Chapter 9 The Eye	277
Chapter 10 The Central Visual System	309
Chapter 11 The Auditory and Vestibular Systems	343
Chapter 12 The Somatic Sensory System	387
Chapter 13 Spinal Control of Movement	423
Chapter 14 Brain Control of Movement	451
Part 3 The Brain and Behavior	479
Chapter 15 Chemical Control of the Brain and Behavior	481
Chapter 16 Motivation	509
Chapter 17 Sex and the Brain	533
Chapter 18 Brain Mechanisms of Emotion	563
Chapter 19 Brain Rhythms and Sleep	585
Chapter 20 Language	617
Chapter 21 Attention	643
Chapter 22 Mental Illness	661
Part 4 The Changing Brain	687
Chapter 23 Wiring the Brain	689
Chapter 24 Memory Systems	725
Chapter 25 Molecular Mechanisms of Learning and Memory	761
Glossary	795
References and Resources	817
Index	837

章节摘录

版权页：插图： are electrically charged particles. Consider the situation in Figure 3.9, where wires from the two terminals of a battery are placed in a solution containing dissolved NaCl. Remember, opposite charges attract and like charges repel. Consequently, there will be a net movement of Na⁺ toward the negative terminal (the cathode) and of Cl⁻ toward the positive terminal (the anode) . The movement of electrical charge is called electrical current, represented by the symbol I and measured in units called amperes (amps) . According to the convention established by Benjamin Franklin, current is defined as being positive in the direction of positive-charge movement. In this example, therefore, positive current flows in the direction of Na⁺ovement,from the anode to the cathode. Two important factors determine how much current will flow: electrical potential and electrical conductance. Electrical potential, also called voltage, is the force exerted on a charged particle, and it reflects the difference in charge between the anode and the cathode. More current will flow as this difference is increased. Voltage is represented by the symbol V and is measured in units called volts. As an example, the difference in electrical potential between the terminals of a car battery is 12 volts; that is, the electrical potential at one terminal is 12 volts more positive than that at the other. Electrical conductance is the relative ability of an electrical charge to migrate from one point to another. It is represented by the symbol g and measured in units called siemens (S) . Conductance depends on the number of particles available to carry electrical charge and the ease with which these particles can travel through space. A term that expresses the same property in a different way is electrical resistance, the relative inability of an electrical charge to migrate. It is represented by the symbol R and measured in units called ohms (Ω) . Resistance is simply the inverse of conductance (i.e., $R = 1/g$) . There is a simple relationship between potential (V) , conductance (g) ,and the amount of current (I) that will flow. This relationship, known as Ohm's law, may be written $I = gV$: Current is the product of the conductance and the potential difference. Notice that if the conductance is zero, no current will flow even when the potential difference is very large. Likewise, when the potential difference is zero, no current will flow even when the conductance is very large. Consider the situation illustrated in Figure 3.10a, in which NaCl has been dissolved in equal concentrations on either side of a phospholipid bilayer. If we drop wires from the two terminals of a battery into the solution on either side, we will generate a large potential difference across this membrane. No current will flow, however, because there are no channels to allow migration of Na⁺ and Cl⁻ across the membrane; the conductance of the membrane is zero. Driving an ion across the membrane electrically, therefore, requires that (1) the membrane possesses channels permeable to that ion, and (2) there is an electrical potential difference across the membrane (Figure 3.10b) .

精彩短评

- 1、经典教材
- 2、浏览了一下，还没有认真看，真的很专业！！希望自己能看下去。。
- 3、帮同学买的，教材，装帧赞
- 4、如果你不是学者专业的真没必要看，特别是第五章开始你更不会想看的
- 5、不是彩图，但是在网上可以下载彩图，不错！
- 6、书是不错的，就是在快递过程中，书页有压痕、折痕。
- 7、以前买过第二版的中文版，挺好的一本书，通俗易懂，琅琅上口！
- 8、搞神经科学的入门书
- 9、LZ啊，这书也只看TXT吗？玩笑开得有点儿大了吧.....
- 10、因为平日里经常要做好长时间的公交车，打算找个神经学的书看看，手机不支持PDF，所以想找个TXT完整版的。要是买书的话根据各位所述好像是买不到了，也舍不得买书。不过对于神经学还是挺感兴趣的，毕竟这一块我还没有探索过，很是好奇
- 11、好。值得推荐。
- 12、非常好懂的语言，算是神经科学的经典教材了
- 13、太简单！！只适合入门。
- 14、nidayede
- 15、读后感有两种，一：这他妈是啥？二：这他妈又是啥？？
- 16、这种生物类的专业书要是不看图，等于白看。

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:www.tushu000.com