

Book Review

THE BRAIN, An Introduction to Functional Neuroanatomy

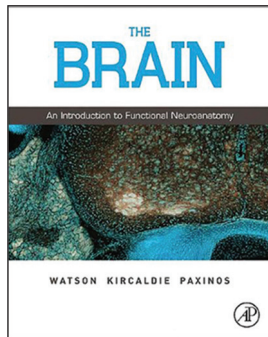
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Watson, Kirkcaldie, and
Paxinos
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The purpose of presenting this great basic functional neuroanatomy book in this journal is to introduce it to the faculties, residents, and those who are involved in teaching the students who are enthusiastic in learning the basic anatomy of the central nervous system (CNS), with few of its clinical applications and some historical backgrounds, in addition to the latest technology used in studying the functional aspect of this sophisticated organ of the human body.

Although the authors of this book are very well known worldwide for their advanced research and publications in this field, this book is an essential tool for introducing the anatomy of the CNS including its functional aspect in a very simple and comprehensive language.

One essential feature of this book is that it explains the basic knowledge related to the CNS step by step.

It consists of 11 chapters and 3 appendices.

First it explains the different types of the nerve cells and synapses followed by the most common neurotransmitters. Then, it explains the animal brain and spinal cord followed by a map of the brain, consequently

peripheral nerves, both spinal and cranial nerves, are explained. Then, it goes on to explain the different aspects of the human CNS. At the end, it explains different techniques used in studying the brain, which starts with cutting the brain and staining it followed by histochemical staining and functional imaging and electrophysiology.

As we go through the evolutionary history of science, medicine, and technology, there have been trials and errors, some with great successes and some with failures and occasionally with deadly results. Although almost all were well-intended from the part of clinicians/researchers as was seen with the introduction of Prefrontal Lobotomy by Portuguese Neurologist Egas Moniz after the experiments on chimpanzees, which was the sole tool at that time for controlling certain mental illnesses. Unfortunately, later this procedure was misused by Freeman and Watts, and some others, which may have been well-intended rather than to harm the patients (I am not judgmental in this regard). The septic focus theory by Henry Cotton in 1920 ended with inflicting many innocent patients. These points should be introduced with caution.

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On the contrary, the work of Philippe Pinel in 1793 from France who revolutionized the care of psychiatric patients by bringing them out of the dark dungeons and liberating them from chains and introducing more humanistic care of mentally challenged patients, which at that time were very badly treated around the world, especially in Europe by showing the psychiatric patients around the city for public amusement (Bethlehem Hospital in London). Or invention of the Thorazin/Largactil (the first medication invented for treating psychiatric patients) in December 11, 1951 by French Scientists for treatment of certain psychiatric disorders should be praised.

Hence, certain negative points mentioned in this unique book should be considered with caution so that the future generation of scientists that we are training to be more

optimistic and open-minded by realizing the limitation of the scientific tools in the past and present, so that they become more motivated to look forward for proper application of the future technologies in discovering the etiologies and treatments of the CNS disorders.

Another point of consideration at the present time is the overuse of instrumentation in treating certain vertebral column disorders by limited number of spinal surgeons, even well-intended, will most likely have grave consequences in future by the aging patients due to the natural process of osteoporosis that is expected to happen to most of us.

Overall, the value of this great book needs to be emphasized in teaching our field to the next generation.