



## Book Review

# The brain: An illustrated history of neuroscience

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Received : 02 April 19

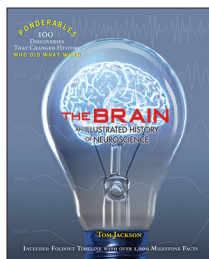
Accepted : 07 April 19

Published : 19 June 19

### DOI

10.25259/SNI-212-2019

### Quick Response Code:



**Author** : Tom Jackson  
**Published by** : Shelter Harbor Press,  
603 West 115<sup>th</sup> Street Suite 163,  
New York, New York 10025, USA  
**Hardcover**  
**Price** : \$ 24.95  
**ISBN** : 978-0-9853230-8-0  
**Year** : 2016

From time to time, it is important for all of us to remind ourselves of the efforts made and the hardships that our pioneering fathers went through in discovering new findings in the scientific fields in general and especially in the medical field and its related branches.

When we think of the inventions and discoveries which have been done with the limited tools and equipment that were available in their times, especially under certain religious oppression in certain fields, especially Anatomy, one wonders how genius these people were in comparison to the discoveries which are made at the present time with the modern tools available that are easily accessible.

May be they were smarter and more intelligent and persistent than our current scientists.

For sure majority of those people in the past worked in a more spiritual and ethical era.

The current book of the history of neuroscience is a perfect example for all of us who may be interested in knowing this fact.

The book starts with the prehistoric evidence of how human beings had undergone surgery by producing a hole in the skull (trephination) for whatever reasons to treat certain diseases and the subjects survived.

Then, it briefly goes through the history of the ancient Egyptian Brain, followed by the lack of the role of brain in Chinese Medicine. Subsequently, it discusses the era of Greek, Roman, and, finally, Islamic medicine pioneers.

One of the prominent figures in the Islamic era is Persian Scholar Avicenna who also brought the idea of dualism of the brain.

Another interesting story mentioned here is the story of invention of Camera Obscura by Alhazen who is regarded as one of the first scientific experiments realized by a Scholar while he was imprisoned. Interestingly, there is a beautiful drawing that demonstrates this experiment.

Then, the author mentions different scientists and their discoveries and explains beautifully their contributions and ideas in regard to the brain discoveries.

One very important point about this book is the quality of the drawings and photos, which makes this book very unique and attracts the attention of the readers to delve through it.

It would be nice in future if the author considers adding few of the Pioneering Neurosurgeons who contributed enormously to the advancement of the neuroscience; notably: Harvey Cushing (founder of the field of Neurosurgery) and Walter Dandy (both from USA), Jean Talairach (from France), and Wilder Penfield (from Canada), just to mention a few. The former two contributed significantly to the study of epilepsy and its treatment.

One interesting point that is mentioned in this book is in regard to the theory of Dualism versus Monism which has been the topic of discussion since the era of great Greek philosophers from the Plato (428–348 BC) and Aristotle (384–322 BC) time, then by famous Persian physician/philosopher Avicenna (980–1037), and, finally, more emphasized by the French mathematician/philosopher Rene Descartes (1596–1650).

Although our advancement in neuroanatomy, neurophysiology, and neuroscience has discovered many aspects of the brain function, no scientific study has been done in regard to this topic which could be a key element in solving many questions in the brain function.

Does another factor exist in regard to the function of the brain, calling it the Mind or Soul, which is separate from the brain organ *per se*, which has not yet been discovered.

All the current focuses of neuroscience are at the molecular, genetic, or imaging aspect of the brain function and no effort has been done to prove or disapprove the presence of this factor whatever one may call it, Mind or Soul.

Hopefully, science in future will be able to find a tool to discover the origin of the mind what so ever it be, rather than to be a neuron *per se*.

All that said, this is a great history book for all of us who are interested to know what our pioneering founders of neuroscience went through for pursuing their passion of science notably neuroscience.

I just finish with one sentence from this precious book:

“The Best Physician is also a Philosopher.” GALEN

**How to cite this article:** Khonsary SA. The brain: An illustrated history of neuroscience. *Surg Neurol Int* 2019;10:112.