

Galvani's Spark: The Story of the Nerve Impulse

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Galvani's Spark chronicles the gradual understanding of the nerve impulse which is the basis of all thoughts, sensations and actions. The story begins with Luigi Galvani's chance observation of a spark from a friction machine causing a frog's leg to twitch from across the room. The accurate recording and the understanding of the properties of the nerve fiber membrane that makes the impulse possible became the objectives of neuroscientists for over 200 years.

The author, Alan J. McComas finely interweaves the stories, the challenges, and the controversies of the most prominent figures in neuroscience, from the histological descriptions of nerve cells by Cajal to the discovery of a three-dimensional structure of ion channels in cell membranes by MacKinnon. Along the way he details the first recordings of the impulse with a cathode ray oscilloscope by Gasser and Erlanger, Adrian's discovery that stimulus intensity is coded by the frequency of nerve impulses, and Hodgkin and Huxley's brilliant voltage clamp experiments, amongst many others.

The recognition by Galvani that muscles and nerves have an electrical component triggered the field of neurophysiology and in turn has produced some of the greatest discoveries in neuroscience. 16 investigators of the nerve impulse went on to win or share Nobel prizes and this book not only emphasizes their work but also traces their brilliant careers. For anyone interested in the nervous system and the history of neuroscience, *Galvani's Spark: The Story of the Nerve Impulse* is essential reading.

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Kerri Goodman:

Spent a free time for you to be fun activity to accomplish! A lot of people spent their spare time with their family, or their very own friends. Usually they undertaking activity like watching television, planning to beach, or picnic from the park. They actually doing same thing every week. Do you feel it? Will you something different to fill your own personal free time/ holiday? Might be reading a book can be option to fill your cost-free time/ holiday. The first thing that you will ask may be what kinds of book that you should read. If you want to try out look for book, may be the publication untitled Galvani's Spark: The Story of the Nerve Impulse can be good book to read. May be it could be best activity to you.

Loren Velasco:

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