

Eccles J C. *The physiology of synapses*. Berlin, FRG: Springer-Verlag, 1964. 316 p.  
[Australian National University, Canberra, Australia]

The book gives a comprehensive review of chemical and electrical synapses for both vertebrates and invertebrates. It must be recognized that it was at the onset of an immense wave of synaptic investigations. The greater part describes fundamental studies that set the foundation for all subsequent developments. It is unique in the fact that so many of the 102 illustrations are selected from actual experimental recordings. [The SCI® indicates that this book has been cited in over 1,970 publications.]

## The Mechanism of Synaptic Transmission

John Eccles  
Ca' a la Gra'  
CH 6646 Contra, Ticino  
Switzerland

March 14, 1990

The book grew out of an extensive review that I had published in 1961.<sup>1</sup> I realized that this review of the rapidly developing field of synaptic transmission needed a much wider circulation than for the *Ergebnisse*. I got the necessary permission from Dr. Heinz Götze of Springer-Verlag, and during 1963 I was working most intensely on this most ambitious venture of my life—a monograph covering all aspects of the neurobiology of synapses. It was entitled *The Physiology of Synapses*. The manuscript was submitted in the early summer of 1963 and went through galleys and page proofs in the autumn. Then came a crisis.<sup>2</sup> My Nobel award was announced in late October 1963. Dr. Götze saw the challenge to have my book appear at the time of the award ceremony in Stockholm. But it seemed an impossible goal. I was strug-

gling in Canberra with the subject indexing—just before leaving for Stockholm. Finally, the 40 pages of that typescript were dispatched from Canberra by express air in late November.

I was sure the book would miss the deadline. But I had not counted on Dr. Götze. On Sunday, December 8, six bound volumes of the *The Physiology of Synapses* were delivered to me at the Grand Hotel in Stockholm. I was overwhelmed with joy and wonder and only later heard how this miracle had been accomplished. On Monday all the leading booksellers had a copy on display, and on Tuesday, December 10, the day of the Nobel award, there were sufficient copies in Stockholm for unrestricted sales.

As far as I have been told, Springer had the volumes assembled waiting for the subject index. As soon as it arrived in Heidelberg on Monday, December 2, it was dispatched by car to the printers at Würzburg along with Dr. Robert Schmidt, who did the proofreading in the printery. Thus the assembly of the volumes could be done with maximum expedition for their Sunday arrival in Stockholm by express delivery. After that most auspicious "delivery" *The Physiology of Synapses* has had a good life, selling over 20,000 copies. A few years later there were such explosive developments that such a book could not be written by one author. Now, we have to be content with the patchwork publishing of multiple authors. Despite the urging of Dr. Götze, I did not find it possible to create a second edition with a comprehensive coverage matching the original. However, the original is still alive in its twenty-seventh year. It sells, I presume, as a record of the state of the art in classical times!

In a recent book by Patrick McGeer, Edith G. McGeer, and me, *Molecular Neurobiology of the Mammalian Brain* (second edition), there are references to the book on nine pages.<sup>3</sup>

1. Eccles J C. The mechanism of synaptic transmission. *Ergebn. Physiol.* 51:299-430, 1961. (Cited 150 times.)
2. -----, My scientific odyssey. *Annu. Rev. Physiol.* 39:1-18, 1977.
3. McGeer P, Eccles J C & McGeer E G. *Molecular neurobiology of the mammalian brain*. New York: Plenum Press, 1987. 774 p. (Cited 25 times.)

1A-24