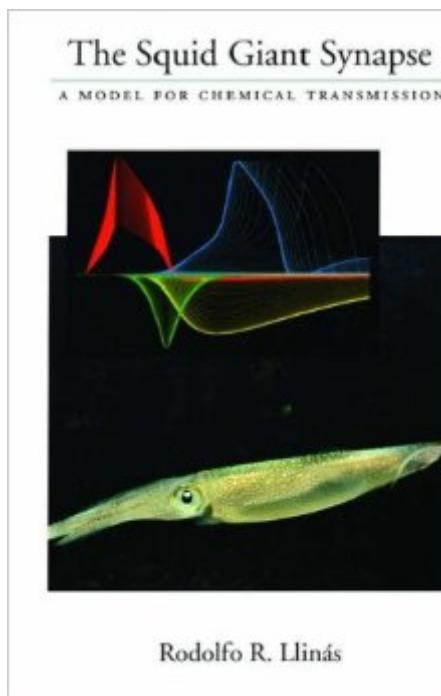


[The book was found](#)

The Squid Giant Synapse: A Model For Chemical Transmission



Synopsis

The squid giant synapse is the single most important model for investigating the transmitter release mechanism in chemical junctions. This unique book, by a leading expert in the field, gives a concise overview of all that has been learned about synaptic transmission in this superb model system. It covers in detail the biophysics of the voltage-dependent calcium currents, calcium concentration microdomains, and much of the molecular basis for the triggering of the secretory event. Ideal for graduate and undergraduate courses, the book includes PC and Macintosh versions of two programs for simulating and manipulating any aspect of synaptic transmission. One program is a modeling tool designed for working neuroscientists, and the other teaches the basic principles of synaptic transmission by allowing students to alter the parameters, essentially without limits, and see the effects on the action potential over time. Anyone studying this central topic of neuroscience will find this book an invaluable resource.

Book Information

Hardcover: 224 pages

Publisher: Oxford University Press; 1 edition (December 15, 1999)

Language: English

ISBN-10: 0195116526

ISBN-13: 978-0195116526

Product Dimensions: 6.1 x 0.8 x 9.3 inches

Shipping Weight: 1.2 pounds

Average Customer Review: 5.0 out of 5 stars See all reviews (1 customer review)

Best Sellers Rank: #1,979,087 in Books (See Top 100 in Books) #376 in Books > Science & Math > Biological Sciences > Biophysics #563 in Books > Science & Math > Chemistry > Physical & Theoretical > Physical Chemistry #1322 in Books > Textbooks > Medicine & Health Sciences > Medicine > Basic Sciences > Neuroscience

Customer Reviews

Review of "The Squid Giant Synapse" a model for chemical transmission" by Rodolfo R. Llinas. It was a pleasure to read this small book because Professor Llinas has managed to review his work and that of others within 160 pages. Llinas has written a very readable book that traces the history of transmission at the synapse. He has covered this difficult subject synthesizing ultrastructure, electrophysiology and molecular biology. The writer has been prominent in this field for 30 years and the book reflects his deep understanding of the subject. Dr. Llinas has managed to incorporate

the major findings of some 500 papers into a working hypothesis of synaptic transmission. In spite of the complexity of the subject there are few errors. On page 65 microdomains should be in square microns and not square millimeters but this typographical error should be obvious when looking at Figure 3.2G and Plate 8. This little book is a must for graduate students and neuroscientists in general because it serves as both a starting reference and as a working text. The index is very helpful to find definitions used in the field (a glossary would be helpful). The software shows the relationship of the presynaptic calcium current and postsynaptic voltage. This program will be instructive to students in understanding the importance of calcium dependencies on transmitter release. The Squid Giant Synapse should be a companion with Nerve, Muscle and Synapse by B.Katz and The Physiology of Synapses by J.C. Eccles.

[Download to continue reading...](#)

The Squid Giant Synapse: A Model for Chemical Transmission Squid: The Definitive Guide Sex in the Sea: Our Intimate Connection with Sex-Changing Fish, Romantic Lobsters, Kinky Squid, and Other Salty Erotica of the Deep Model Cars You Threw Away: Guide to Pricing and Collecting Obsolete Diecast Model Cars Basic Painting and Weathering for Model Railroaders, Second Edition (Model Railroader Books: Essentials) Basic Model Railroad Benchwork (Model Railroader Essentials Series) Building N Gauge Model Railway Layouts (Building Model Railway Layouts Book 1) Introduction to Model Railroading (Model Railroader's How-To Guides) Painting Backdrops for Your Model Railroad (Model Railroader's How-To Guides) Designing & Building Multi-Deck Model Railroads (Model Railroader) Model Railroad Electronics: Basic Concepts to Advanced Projects (Model Railroad Handbook) Ho Scale Model Railroading: Getting Started in the Hobby (Model Railroader Books) Building a Ready-To-Run Model Railroad (Model Railroader's How-To Guides) How to Build Model Railroad Benchwork, Second Edition (Model Railroader) Basic Structure Modeling for Model Railroaders (Model Railroader Books) Model Locomotive Boilermaking (Model Engineering Guides) The Jennifer Nicole Lee Fitness Model Diet: JNL's Super Fitness Model Secrets To A Sexy, Strong, Sleek Physique Chemical Engineering Design and Analysis: An Introduction (Cambridge Series in Chemical Engineering) Analysis of Engineering Design Studies for Demilitarization of Assembled Chemical Weapons at Pueblo Chemical Depot (The Compass series) Fluid Mechanics for Chemical Engineers (McGraw-Hill Chemical Engineering)

[Dmca](#)