1. Record Nr. UNINA9910814794503321 Autore Shepherd Gordon M. <1933-> Titolo Foundations of the neuron doctrine / / Gordon M. Shepherd Pubbl/distr/stampa Oxford;; New York:,: Oxford University Press,, [2016] ©2016 **ISBN** 0-19-025940-X 0-19-026848-4 0-19-025939-6 Edizione [Twenty-fifth anniversary edition.] Descrizione fisica 1 online resource (385 pages) 611/.809 Disciplina Soggetti Neuroanatomy - History Neurons - History Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. From the beginnings to the cell theory -- Do nerve cells belong in the Nota di contenuto cell theory? -- Nerve cells or nerve nets? -- Kolliker gives in -- Support builds for network -- The nerve cell studies of Freud -- The revolutionary method of Golgi -- A neuron theory begins to take form : His, Forel, Nansen -- Ramon y Cajal: the shock of recognition -- The early discoveries of Cajal -- The laws of Cajal -- Joining the mainstream -- The neuron doctrine -- The law of dynamic polarization -- Controversy -- The synapse and the growth cone -- Forging a consensus -- Confrontation in Stockholm -- Modern revisions of the neuron doctrine. Sommario/riassunto The neuron doctrine, first formulated in 1891, states that the brain is constructed of individual neurons, organized into functioning circuits that mediate behaviour. Above all else, this is the main concept that underlies all of modern neuroscience. This 25th anniversary edition explains how this theory was the product of an explosion of histological studies and vigorous debates near the end of the 19th century by an extraordinary group of scientists, most importantly the leading figure of the time, Santiago Ramon y Cajal of Spain, and includes the foremost nervous system investigators of many countries, such as Albrecht Kolliker, Sigmund Freud.