1. Record Nr. UNINA9911019694503321

Titolo	Steroids and neuronal activity
Pubbl/distr/stampa	Chichester, West Sussex, England ; ; New York, : Wiley, 1990
ISBN	9786612347672 9781282347670 1282347675 9780470513989 0470513985 9780470513996 0470513993
Descrizione fisica	1 online resource (296 p.)
Collana	Ciba Foundation symposium ; ; 153
Altri autori (Persone)	ChadwickDerek WiddowsKate
Disciplina	612.8/14
Soggetti	Neuroendocrinology Steroid hormones - Physiological effect Neurons
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Symposium on Steroids and Neuronal Activity, held at the Ciba Foundation, London, 23-25 January 1990"--P. v. "A Wiley-Interscience publication." Editors: Derek Chadwick, organizer, and Kate Widdows.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	STEROIDS AND NEURONAL ACTIVITY; Contents; Introduction; Steroid effects on neuronal activity: when is the genome involved?; Neuroendocrine metabolism of progesterone and related progestins; Steroid modulation of the GABAA receptor complex: electrophysiological studies; Steroid regulation of the GABAA receptor: ligand binding, chloride transport and behaviour; Steroid binding at si receptors: CNS and immunological implications; General discussion I : Gene-mediated corticosteroid effects on neuronal excitability; Effects of progesterone and its metabolites on neuronal membranes In vitro effects of 17B-oestradiol on the sensitivity of receptors coupled to adenylate cyclase on striatal neurons in primary cultureEffect of

oestradiol on dopamine receptors and protein kinase C activity in the rat pituitary: binding of oestradiol to pituitary membranes; The molecular features of membrane perturbation by anaesthetic steroids: a study using differential scanning calorimetry, small angle X-ray diffraction and solid state 2H NMR; Effects of prostaglandin E2 and progesterone on rat brain synaptosomal plasma membranes; Steroids and neuronal destruction or stabilization
General discussion II : Sex differences in GABA-mediated responsesSteroids in relation to epilepsy and anaesthesia; Early and late effects of steroid hormones on the central nervous system; Final general discussion : Use of adrenal corticosteroids in sports; Steroids and anaesthesia; Role of steroids in the brain; Genomic or non-genomic?; Summing-up; Index of contributors; Subject index

Sommario/riassunto

Classical studies of steroid hormones are concerned with their regulation of protein synthesis via the modulation of genomic transcription. But many of the actions of these hormones occur too rapidly to be explained in this manner, particularly their effects on the central nervous system. This text deals with recent discoveries showing that steroids can modulate the activity of some neurotransmitters. It explores the role of GABA as an important regulator of neuronal activity in the central nervous system and its inhibitory action as mediated via the GABA receptor and potentiated by steroids.