Record Nr. UNINA9910831089303321 **Titolo** Calcium and the cell [[electronic resource]] Chichester:: New York,: Wiley, 1986 Pubbl/distr/stampa **ISBN** 1-282-34582-6 9786612345821 0-470-51334-9 0-470-51335-7 Descrizione fisica 1 online resource (312 p.) Collana Ciba Foundation symposium:: 122 Altri autori (Persone) EveredDavid WhelanJulie Disciplina 574.19 574.19214 574.876042 Calcium - Physiological effect Soggetti Calcium-binding proteins Cellular control mechanisms Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Editors: David Evered (organizer) and Julie Whelan. Note generali "Symposium on Calcium and the Cell, held at the Ciba Foundation, London, 22-24 October 1985"--p.v. "A Wiley-Interscience publication." Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto CALCIUM AND THE CELL; Contents; Participants; Introduction; Voltagedependent mechanisms for raising intracellular free calcium concentration: calcium channels; Vol tag e-de pend en t mob i l izat ion of intracellular calcium in skeletal muscle; Inositol trisphosphate and calcium mobilization; The calcium pump of plasma membranes; The sodium-calcium exchange system; Structural and mechanistic implications of the amino acid sequence of calcium- transporting ATPases: General discussion: Calcium binding to skeletal muscle troponin C and the regulation of muscle contraction The physics and chemistry of the calcium-binding proteinsRegulation of the calcium signal by cal modul in; Smooth muscle: regulation by

calcium and phosphorylation; Role of protein kinase C in calcium-

## Sommario/riassunto

mediated signal transduction; Calcium in the action of growth factors; Calcium and the regulation of cytoskeletal assembly, structure and contract i li ty; Calcium and exocytosis; Calcium and morphogenetic fields; Index of contributors; Subject index

This collection of presentations from the Ciba Foundation Symposium of 1985 deals with the central role of calcium in intracellular processes. Discusses control of intracellular calcium as well as control by intracellular calcium, covering such topics as muscle contraction, metabolic processes, hormone and transmitter secretion, membrane transport and permeability, cellular architecture and growth, and the possible contribution of calcium gradients to early embryonic development. Includes carefully edited and extensive (almost half the book) discussions of chapter topics between active workers