Record Nr. UNINA9910830699103321 Titolo Carbohydrate recognition in cellular function [[electronic resource]] Chichester [England];; New York,: Wiley, 1989 Pubbl/distr/stampa **ISBN** 1-282-34761-6 9786612347610 0-470-51382-9 0-470-51383-7 Descrizione fisica 1 online resource (306 p.) Collana Ciba Foundation symposium:: 145 Altri autori (Persone) BockGregory HarnettSara Disciplina 574.87 574.876 599.019248 Soggetti Cell receptors Carbohydrates Cellular recognition Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Symposium on Carbohydrate Recognition in Cellular Function, held at Note generali the Ciba Foundation, London, 15-17 November 1988"--P v. "Editors: Gregory Bock (organizer) and Sara Harnett"--p v. "A Wiley-Interscience publication." Nota di bibliografia Includes bibliographical references and indexes. CARBOHYDRATE RECOGNITION IN CELLULAR FUNCTION; Contents; Nota di contenuto Introduction; Oligosaccharide-protein interactions: a three-dimensional view; Multifunctional glycoprotein receptors for insulin and the insulinlike growth factors; Multiple subfamilies of carbohydrate recognition domains in animal lectins; Glycoprotein oligosaccharides as recognition structures; Binding modes of mammalian hepatic Gal/GalNAc receptors; General discussion I: Two human lysosomal membrane glycoproteins; Nucleoplasmic and cytoplasmic glycoproteins Bioactive ganglioside-mediated carbohydrate recognition in coupling with ecto-protein phosphorylationRole of carbohydrates in receptormediated fertilization in mammals; Families of neural adhesion

molecules; Structural and biological properties of the carbohydrate

units of nervous tissue glycoproteins; Carbohydrate recognition in neuronal development: structure and expression of surface oligosaccharides and B-galactoside-binding lectins; General discussion II: Expression of developmentally regulated carbohydrates; Function and pathology of the sugar chains of human immunoglobulin G The role of oligosaccharides in modifying protein functionLeukosialin, a major sialoglycoprotein defining leucocyte differentiation; Final general discussion: The diversity of N-linked oligosaccharides on human immunodeficiency virus; Chairman's summing-up; Index of contributors; Subject index

## Sommario/riassunto

Contributors to this volume explore the role of carbohydrates in communication between cells of multicellular organisms. Topics covered include the thermodynamics and spatial restrictions of oligosaccharide-protein interactions, the role of carbohydrates in recognition and as components of cell adhesion molecules, and abnormal glycosylation in several disease states.