1. Record Nr. UNINA9910877754003321 Autore Smith C. U. M (Christopher Upham Murray) Titolo Biology of sensory systems / / C.U.M. Smith Pubbl/distr/stampa Chichester, UK; ; Hoboken, NJ, : John Wiley & Sons, 2008 **ISBN** 1-282-34854-X 9786612348549 0-470-69437-8 0-470-69438-6 Edizione [2nd ed.] Descrizione fisica 1 online resource (536 p.) Disciplina 612.8 573.87 Soggetti Senses and sensation **Biology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record Nota di bibliografia Includes bibliographical references (p. [493]-495) and index. Nota di contenuto Biology of Sensory Systems: CONTENTS: Preface to Second Edition: Preface to First Edition; PART I:PRELIMINARIES; Chapter 1 Elements; Chapter 2 Membranes, Action Potentials, Synapses; Chapter 3 General Features of Sensory Systems: Chapter 4 Classification and Phylogeny: Chapter 5 Genes, Genomics and Neurosensory Systems; PART II: MECHANOSENSITIVITY; Chapter 6 Mechanosensitivity of Cell Membranes; Chapter 7 Kinaesthesia; Chapter 8 Touch; Chapter 9 Equilibrium and Hearing: The Uses of Hair Cells; Chapter 10 Cerebra IAnalysis; PART III:CHEMOSENSITIVITY; Chapter 11 Chemosensitivity in **Prokarvocytes** Chapter 12 Mammalian Chemo- EnteroreceptorsChapter 13 Gustation; Chapter 14 Olfaction; PART IV:PHOTOSENSITIVITY; Box I4.1 Bacteriorhodopsin; Chapter 15 Invertebrate Vision; Chapter 16 The Human Eye; Chapter 17 The Retina; Chapter 18 Visual Pathways and Cortices; Chapter 19 Other Vertebrate Visual Systems; PART V:OTHER SENSES; Chapter 20 Thermosensitivity; Chapter 21 Minority Senses; Chapter 22 Pain; PART VI:CODA; Chapter 23 S

Since publication of the first edition, huge developments have taken

place in sensory biology research and new insights have been provided

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in particular by molecular biology. These show the similarities in the molecular architecture and in the physiology of sensory cells across species and across sensory modality and often indicate a common ancestry dating back over half a billion years. Biology of Sensory Systems has thus been completely revised and takes a molecular, evolutionary and comparative approach, providing an overview of sensory systems in vertebrates, invertebrates and prokaryot