1. Record Nr. UNINA990001360060403321 Autore Ma, Zhong-Qi Yang-Baxter Equation and Quantum Enveloping Algebras / Zhong-Qui Titolo Ma Singapore : World Scientific, 1993 Pubbl/distr/stampa **ISBN** 981-02-1383-2 Descrizione fisica vii, 318 p.; 22 cm Collana Advanced series on theoretical physical science; 1 Disciplina 513 FI1 Locazione Collocazione 11-322F Lingua di pubblicazione Inglese Formato Materiale a stampa

Monografia

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Record Nr. UNINA9910968560903321 Autore Watson Charles Titolo The brain: an introduction to functional neuroanatomy / / Charles Watson, Matthew Kirkcaldie, George Paxinos Amsterdam, : Elsevier, 2010 Pubbl/distr/stampa **ISBN** 9786612878534 9781282878532 1282878530 9780080920481 0080920489 Edizione [1st ed.] Descrizione fisica 1 online resource (216 p.) Altri autori (Persone) KirkcaldieMatthew **PaxinosGeorge** Disciplina 611.8 Soggetti Brain Neuroanatomy 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 and index. Nota di contenuto Front Cover; The Brain: An introduction to FunctionalNeuroanatomy; Copyright Page; Dedication; Preface; Acknowledgments; Introduction; Table of contents; Chapter 1: Nerve cells and synapses; Membrane potentials and action potentials; Neurons and their connections; Glia; Chapter 2: Central nervous system basics-the brain and spinalcord; Why study animal brains?; The main parts of the brain; External features of the brain; The language of brain anatomy; The spinal cord; Chapter 3: A map of thebrain; Mini-atlas of the rat brain; Chapter 4: Peripheralnerves: Motor and sensory nerves Somatic and visceral motor and sensory elementsSpinal nerves; Spinal nerves supplying thelimbs; Cranial nerves; Chapter 5: Command and control-the motorsystems; Command and control of skeletal muscles;

Areas of the motor cortex; The role of non-cortical motor centers;

The roles of the striatum and pallidum in motorcontrol; The final

Survival skills: thehypothalamus; Brainstem and spinal cord modules for control of organizedmovement; Descending control pathways other than the corticospinaltract; The role of the cerebellum in motor control;

common pathway for all motor systems-the motor neuron Command and control of the viscera-the autonomic nervous systemCommand and control of the neuroendocrine system; Chapter 6: Gathering information-the sensorysystems; Receptors; Keeping sensory mapsintact; Interpretation and understanding; Sensory areas in the cerebral cortex; Vision; Hearing; Vestibular system; Taste; Smell; Sensory processing outside the cortex; An example: rolling an ankle; Chapter 7: The human cerebralcortex; The cerebral cortex-anatomy and histology; Guiding principles of cortical structure and function; The functional layout of the human cerebral cortex

The cerebral cortex and behaviorChapter 8: Higher level functions-consciousness, learning, memory, andemotions; Consciousness; Memory; Sleep; Emotions and the amygdala; Chapter 9: When things go wrong-brain disease andinjury; Infections of the brain and spinal cord; Multiple sclerosis; Parkinson's disease; Stroke (cerebrovascular accident); Alzheimer's disease anddementia; Epilepsy; Brain trauma and brain death; Mental illness; The tragic history of the treatment of severe mental illness; Chapter 10: The development of the brain and spinalcord; Genes and brain development

Early development of the brain and spinalcordRegional development of the nervous system-segmentation and organizingcenters; Formation of synapses; Environmental influences on gene expression; Critical periods; Later processes that refine the structure of the brain; Chapter 11: Techniques for studying thebrain; Cutting thin sections of the brain; Staining brain sections; Cell culture; Hodology: using tracers to map connections; Molecular genetics; Non-invasive imaging techniques; Functional imaging; Electrophysiology; Appendix A: Voltages, potentials, and cellmembranes; AppendixB; AppendixC Supplementaryreading

Sommario/riassunto

The authors of the most cited neuroscience publication, The Rat Brain in Stereotaxic Coordinates, have written this introductory textbook for neuroscience students. The text is clear and concise, and offers an excellent introduction to the essential concepts of neuroscience. Based on contemporary neuroscience research rather than old-style medical school neuroanatomy. Thorough treatment of motor and sensory systems. A detailed chapter on human cerebral cortex. The neuroscience of consciousness, memory, emotion, brain injury, and mental