Record Nr. UNINA9910585788203321

The Emotional Cerebellum / / edited by Michael Adamaszek, Mario Titolo

Manto, Dennis J. L. G. Schutter

Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,,

2022

ISBN 3-030-99550-X

Edizione [1st ed. 2022.]

Descrizione fisica 1 online resource (310 pages)

Collana Advances in Experimental Medicine and Biology, , 2214-8019; ; 1378

Disciplina 612.827

612.8

Soggetti Neurosciences

Emotions

Neuropsychology Neuroscience **Emotion** Cerebel

Neurofisiologia **Emocions**

Llibres electrònics

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Part I. Basic Principles of Cerebellar Function in Emotion -- Chapter 1. Nota di contenuto

> Introduction into the Role of the Cerebellum in Emotion -- Chapter 2. Principles of Brain and Emotion: Beyond the Cortico-Centric Bias --Chapter 3. Cerebellum and Emotion Processing -- Chapter 4.

Cerebellum and Emotion Recognition -- Chapter 5. Cerebellum and Emotion Memory -- Part II. Cells and Molecules of Emotions in the Cerebellum -- Chapter 6. Topography of Emotions in Cerebellum as Appraised by Functional Imaging -- Chapter 7. The Neurophysiology of

the Cerebellum in Emotion -- Chapter 8. Non-invasive Brain

Stimulation of the Cerebellum in Emotion -- Part III. Cerebellum and Emotion in High Order Domains -- Chapter 9. Reward-Based Learning and Emotional Habit Formation in the Cerebellum -- Chapter 10.

Cerebellar Contribution to Emotional Body Language Perception --

Chapter 11. Influence of Pain on Cognitive Dysfunction and Emotion Dysregulation in Chiari Malformation Type I -- Chapter 12. Cerebellum and Emotion in Morality -- Chapter 13. Music and the Cerebellum -- Chapter 14. The Cerebellum and Beauty: The Impact of the Cerebellum in Art Experience and Creativity -- Chapter 15. Cerebellum and Emotion in Social Behavior -- Chapter 16. Cerebellum, Embodied Emotions, and Psychological Traits -- Part IV. Cerebellum and Emotion Disorders -- Chapter 17. The Cerebellum and Disorders of Emotion -- Chapter 18. Cerebellum and Neurorehabilitation in Emotion with a Focus on Neuromodulation -- Part V. Perspectives -- Chapter 19. Current and Future Perspectives of the Cerebellum in Affective Neurosciences.

Sommario/riassunto

Emotions represent a critical aspect of daily life in humans. Our understanding of the mechanisms of regulation of emotions has increased exponentially these last two decades. This book evaluates the contribution of the cerebellum to emotion. It outlines the current clinical, imaging and neurophysiological findings on the role of the cerebellum in key aspects of emotional processing and its influence on motor and cognitive function and social behavior. In the first section, the reader is introduced to the contributions of the cerebellum to various emotion domains, from emotion perception and recognition to transmission and encoding. Subsequent chapters provide a comprehensive picture of the neurophysiology and topography of emotion in the cerebellum and illustrate the convergence of theoretical and empirical research. Additional chapters address the cerebellum's involvement in emotional learning, emotional pain, emotional aspects of body language and perception, and its relations to social cognition including morality, music, and art. Finally, neuropsychiatric aspects of the cerebellum's influence on mood disorders and the current state of therapeutic options, including noninvasive stimulation approaches, complete the overview. This is the first book summarizing the current state of knowledge on the contribution of the cerebellum to important aspects of emotion. It is an essential reference for students, trainees, neuroscientists, researchers, and clinicians in neuroscience, neurology, neurosurgery and psychology involved in the study of emotions. The authors are renowned scientists in the field of cerebellar research.